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NEWS 3
        DEC 05 CASREACT(R) - Over 10 million reactions available
        DEC 14
NEWS 4
                2006 MeSH terms loaded in MEDLINE/LMEDLINE
        DEC 14
                2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
NEWS 5
        DEC 14
NEWS
     6
                CA/CAplus to be enhanced with updated IPC codes
NEWS
     7
        DEC 21
                IPC search and display fields enhanced in CA/CAplus with the
                IPC reform
NEWS 8
        DEC 23
                New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/
                USPAT2
NEWS 9
        JAN 13
                IPC 8 searching in IFIPAT, IFIUDB, and IFICDB
NEWS 10 JAN 13 New IPC 8 SEARCH, DISPLAY, and SELECT enhancements added to
                INPADOC
NEWS 11 JAN 17 Pre-1988 INPI data added to MARPAT
NEWS 12 JAN 17 IPC 8 in the WPI family of databases including WPIFV
NEWS 13 JAN 30 Saved answer limit increased
                Monthly current-awareness alert (SDI) frequency
NEWS 14 JAN 31
```

NEWS EXPRESS JANUARY 03 CURRENT VERSION FOR WINDOWS IS V8.01,
CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
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http://download.cas.org/express/v8.0-Discover/

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=> fil reg COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21 FILE 'REGISTRY' ENTERED AT 19:46:18 ON 01 FEB 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 American Chemical Society (ACS)

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http://www.cas.org/ONLINE/UG/regprops.html

> 7465603 ACID 8877 ACIDS

7472227 ACID

(ACID OR ACIDS)
379 LIGNOSULFONIC ACID
(LIGNOSULFONIC(W)ACID)

=> s lignosulfonic acid/cn

L3 1 LIGNOSULFONIC ACID/CN

=> d

L2

L3 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2006 ACS on STN

RN 8062-15-5 REGISTRY

ED Entered STN: 16 Nov 1984

CN Lignosulfonic acid (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Ameribond 2X

CN Borresperse 3A

CN HR 6L

CN HR 7

```
CN
     Indulin SN
     Lignin, sulfite
CN
     Ligninsulfonate
CN
     Ligninsulfonic acid
CN
CN
     Lignosulfate
CN
     Lignosulfonate
CN
     LST 7
     Poly(lignosulfonic acid)
CN
CN
     Protektol W
CN
     Sanex C
     Sulfite lignin
CN
CN
     Sulfolignin
CN
     Sulfonic acids, ligno
CN
     Sulfonyllignin
CN
     Vanilex HW
CN
     Wafex SR
DR
     58318-45-9
MF
     Unspecified
CI
     PMS, COM, MAN
PCT Manual registration, Polyother, Polyother only
     STN Files: AGRICOLA, ANABSTR, AQUIRE, BIOSIS, BIOTECHNO, CA, CAPLUS,
LC
       CASREACT, CBNB, CHEMLIST, CIN, CSCHEM, EMBASE, IFICDB, IFIPAT, IFIUDB,
       MEDLINE, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*, TOXCENTER, TULSA,
       USPAT2, USPATFULL, VTB
         (*File contains numerically searchable property data)
     Other Sources: DSL**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
```

5415 REFERENCES IN FILE CA (1907 TO DATE)
2441 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
5418 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> sel rn name
El THROUGH E22 ASSIGNED

=> fil hcapl

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This file contains CAS Registry Numbers for easy and accurate

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=> s e1-22
             1 "AMERIBOND"/BI
          7593 "2X"/BI
             1 "AMERIBOND 2X"/BI
                 (("AMERIBOND"(W)"2X")/BI)
            24 "BORRESPERSE"/BI
         30448 "3A"/BI
             1 "BORRESPERSE 3A"/BI
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        445553 "HRS"/BI
        784413 "HR"/BI
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           770 "6L"/BI
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          3392 "SNS"/BI
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            69 "LIGNIN, SULFITE"/BI
                 (("LIGNIN"(W)"SULFITE")/BI)
          1292 LIGNINSULFONATE/BI
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          1358 LIGNINSULFONATE/BI
                ((LIGNINSULFONATE OR LIGNINSULFONATES)/BI)
           588 "LIGNINSULFONIC"/BI
       4094502 "ACID"/BI
       1508860 "ACIDS"/BI
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                 (("ACID" OR "ACIDS")/BI)
           583 "LIGNINSULFONIC ACID"/BI
                 (("LIGNINSULFONIC"(W) "ACID")/BI)
           239 LIGNOSULFATE/BI
            45 LIGNOSULFATES/BI
           271 LIGNOSULFATE/BI
                 ((LIGNOSULFATE OR LIGNOSULFATES)/BI)
          6963 LIGNOSULFONATE/BI
         2652 LIGNOSULFONATES/BI
          7738 LIGNOSULFONATE/BI
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   1506 "LST"/BI
     19 "LSTS"/BI
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      2 "POLIES"/BI
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          (("POLY"(W)"LIGNOSULFONIC"(W)"ACID")/BI)
     10 "PROTEKTOL"/BI
 385309 "W"/BI
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          (("PROTEKTOL"(W)"W")/BI)
     15 "SANEX"/BI
3407606 "C"/BI
      2 "SANEX C"/BI
          (("SANEX"(W)"C")/BI)
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   8232 "SULFITES"/BI
  64678 "SULFITE"/BI
          (("SULFITE" OR "SULFITES")/BI)
  47980 "LIGNIN"/BI
  5036 "LIGNINS"/BI
  48553 "LIGNIN"/BI
          (("LIGNIN" OR "LIGNINS")/BI)
    100 "SULFITE LIGNIN"/BI
          (("SULFITE"(W)"LIGNIN")/BI)
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      7 SULFOLIGNINS/BI
     25 SULFOLIGNIN/BI
          ((SULFOLIGNIN OR SULFOLIGNINS)/BI)
  74674 "SULFONIC"/BI
     20 "SULFONICS"/BI
  74688 "SULFONIC"/BI
          (("SULFONIC" OR "SULFONICS")/BI)
1508860 "ACIDS"/BI
    401 "LIGNO"/BI
     1 "LIGNOS"/BI
    402 "LIGNO"/BI
          (("LIGNO" OR "LIGNOS")/BI)
      1 "SULFONIC ACIDS, LIGNO"/BI
          (("SULFONIC"(W) "ACIDS"(W) "LIGNO")/BI)
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2 SULFONYLLIGNIN/BI
             9 "VANILEX"/BI
             1 "VANILEXES"/BI
             9 "VANILEX"/BI
                 (("VANILEX" OR "VANILEXES")/BI)
          2555 "HW"/BI
            77 "HWS"/BI
          2627 "HW"/BI
                 (("HW" OR "HWS")/BI)
             1 "VANILEX HW"/BI
                 (("VANILEX"(W)"HW")/BI)
             6 "WAFEX"/BI
        129744 "SR"/BI
          4812 "SRS"/BI
        134124 "SR"/BI
                 (("SR" OR "SRS")/BI)
             0 "WAFEX SR"/BI
                 (("WAFEX"(W)"SR")/BI)
          5418 8062-15-5/BI
L4
         12505 ("AMERIBOND 2X"/BI OR "BORRESPERSE 3A"/BI OR "HR 6L"/BI OR "HR
               7"/BI OR "INDULIN SN"/BI OR "LIGNIN, SULFITE"/BI OR LIGNINSULFON
               ATE/BI OR "LIGNINSULFONIC ACID"/BI OR LIGNOSULFATE/BI OR LIGNOSU
               LFONATE/BI OR "LIGNOSULFONIC ACID"/BI OR "LST 7"/BI OR "POLY(LIG
               NOSULFONIC ACID) "/BI OR "PROTEKTOL W"/BI OR "SANEX C"/BI OR
               "SULFITE LIGNIN"/BI OR SULFOLIGNIN/BI OR "SULFONIC ACIDS, LIGNO"
               BI OR SULFONYLLIGNIN/BI OR "VANILEX HW"/BI OR "WAFEX SR"/BI OR
               8062-15-5/BI)
=> s sperm? or contracept?
         71652 SPERM?
         16777 CONTRACEPT?
         85819 SPERM? OR CONTRACEPT?
L5
=> s 14 and 15
            14 L4 AND L5
L6
=> d scan
L6
      14 ANSWERS
                  HCAPLUS COPYRIGHT 2006 ACS on STN
IC
     ICM A61K031-70
     ICS A61K031-79; A61K031-655; A61K031-409; A61K031-185
INCL 514022000; 424078250; 514150000; 514410000; 514553000
     63-6 (Pharmaceuticals)
     Section cross-reference(s): 2
ΤI
     Sulfonated compounds as barrier contraceptives
     sulfonated compd barrier contraceptive
ST
ΙT
     Drug delivery systems
        (aerosols; sulfonated compds. as barrier contraceptives)
IT
     Contraceptives
        (condoms; sulfonated compds. as barrier contraceptives)
IT
     Drug delivery systems
        (controlled-release; sulfonated compds. as barrier
        contraceptives)
IT
     Drug delivery systems
        (foams; sulfonated compds. as barrier contraceptives)
IT
     Drug delivery systems
        (gels; sulfonated compds. as barrier contraceptives)
ΤT
     Contraceptives
        (intravaginal; sulfonated compds. as barrier contraceptives)
IT
     Drug delivery systems
        (ointments, creams; sulfonated compds. as barrier
        contraceptives)
IT
    Medical goods
        (sponges; sulfonated compds. as barrier contraceptives)
```

```
ΙT
     Algae
       Contraceptives
     Embryophyta
     Funqi
     Human
     In vitro fertilization
     Lubricants
       Sperm
        (sulfonated compds. as barrier contraceptives)
ΙT
     Porphyrins
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (sulfonates; sulfonated compds. as barrier contraceptives)
IT
        (sulfonic acid-containing; sulfonated compds. as barrier
        contraceptives)
ΙT
     Drug delivery systems
        (suppositories, vaginal; sulfonated compds. as barrier
        contraceptives)
IT
     Drug delivery systems
        (tablets; sulfonated compds. as barrier contraceptives)
IT
     Medical goods
        (tampons; sulfonated compds. as barrier contraceptives)
IT
     Drug delivery systems
        (vaginal; sulfonated compds. as barrier contraceptives)
IT
     Egg
        (zona pellucida; sulfonated compds. as barrier contraceptives
IТ
     82-76-8, 8-Anilino-1-naphthalenesulfonic acid
                                                    103-65-1D, sulfonated
     520-26-3D, Hesperidine, sulfonated
                                         588-59-0D, Stilbene, sulfonated
     6994-45-2 8062-15-5, Lignosulfonic acid
     8068-05-1D, Kraft lignin, sulfonated
                                            9017-33-8, Formaldehyde-
     naphthalenesulfonic acid copolymer
                                         10139-74-9 26101-52-0,
     Polyvinylsulfonic acid 26795-32-4D, sulfonated, sodium salt
     27119-07-9, Poly(2-acrylamido-2-methyl-1-propanesulfonic acid)
     51121-85-8, 2-Acrylamido-2-methyl-1-propanesulfonic acid-styrene copolymer
     54640-82-3, 2-Acrylamido-2-methyl-1-propanesulfonic acid-acrylonitrile
     copolymer 65595-90-6, N-(6-Aminohexyl)-5-chloro-1-naphthalenesulfonamide
     79975-37-4, Poly(4-vinylpyridine) p-toluenesulfonate 80501-09-3,
     Benzenesulfonic acid-formaldehyde copolymer 84215-10-1,
     N-(6-Aminohexyl)-5-chloro-2-naphthalenesulfonamide
                                                          85353-17-9,
     N-(6-Aminohexyl)-5-bromo-2-naphthalenesulfonamide
     RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
        (sulfonated compds. as barrier contraceptives)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2
L6
      14 ANSWERS HCAPLUS COPYRIGHT 2006 ACS on STN
CC
     46-0 (Surface Active Agents and Detergents)
     Section cross-reference(s): 45
TΤ
     Lipid and other nonpetrochemical raw materials
ST
     review surfactant anionic nonpetrochem; fat deriv surfactant review;
     lignosulfonate surfactant review; sulfate surfactant nonpetrochem
     review
IT
     Carboxylic acids, uses and miscellaneous
     Lipids
     RL: USES (Uses)
        (for anionic surfactant manufacture)
IT
        (anionic, from lipid and other nonpetrochem. raw materials)
                   HCAPLUS COPYRIGHT 2006 ACS on STN
L6
     14 ANSWERS
CC
     10 (Organic Chemistry)
ΤI
     A new oxidation method. II. Action of aldehydes on hydramines of the
     pyrrolidine and piperidine series
```

```
IT
     Alcohols
        (amino-, reaction with aldehydes)
IT
     Oxidation
        (of organic compds., new method)
ΙT
     Aldehydes
        (reaction with hydroxyamines)
     Compound, C13H17ON
IT
     Compound, C13H17ON picrate
     Compound, C7H13ON
     Compound, C7H13ON picrate
     Compound, C9H17ON
     Compound, C9H17ON picrate
IT
     Compound, C9H17ON
     Compound, C9H17ON
        (and derivs.)
     Piperidine, hydroxy amine
     Pyrrolidine, hydroxy amine
        (reaction with aldehydes)
IT
     859953-15-4, 2-Piperidineacetaldehyde, 1,6-dimethyl-
        (isomer and derivs.)
     533-15-3, Piperidine, 2-(\beta-hydroxyethyl)-1-methyl- 5307-19-7,
TΤ
     Pyridine, 2-(\beta-hydroxypropy1)-10047-06-0, 2-Piperidineethanol,
     \alpha-methyl- 10222-77-2, 2-Piperidineethanol, 6-methyl-, \alpha-
     10222-77-2, 2-Piperidineethanol, 6-methyl-, β-
                                                     19432-88-3,
     Pyrrolidine, 2-(β-hydroxyethyl) - 20845-39-0, Piperidine,
     2-(β-hydroxyethyl)-1-methyl-, picrate 22186-60-3, 2-Pyrroleethanol
     67004-64-2, Pyrrolidine, 2-(β-hydroxyethyl)-1-methyl- 86889-68-1,
     2-Pyrrolidineacetaldehyde, 1-methyl- 113865-63-7, Pyrrolidine,
     2-(α-hydroxybutyl)- 859957-99-6, 2-Pyrrolidineacetaldehyde,
     1-methyl-, picrate 859958-01-3, Pyrrolidine, 2-(α-hydroxypropyl)-1-
              860759-21-3, Pyrrolidine, 2-(α-hydroxypropyl)-1-methyl-,
     methyl-
     picrate
             860759-23-5, Pyrrolidine, 2-acetyl-1-ethyl-
        (preparation of)
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0
=> d ibib abs 10-14
    ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                      1970:438532 HCAPLUS
DOCUMENT NUMBER:
                        73:38532
TITLE:
                        Recovery of proteins in waste water
PATENT ASSIGNEE(S):
                        Aktieselskapet Apothekernes Laboratorium for
                        Specialpraeparater
SOURCE:
                        Fr., 6 pp.
                        CODEN: FRXXAK
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
     PATENT NO.
                       KIND
                               DATE
                                         APPLICATION NO.
                                                                  DATE
     ______
                        ----
                               -----
                                           ------
     FR 1581745
                               19690919
                                          FR
     Proteins contained in waste waters can be obtained by precipitation from acid
AB
    solution The proteins are precipitated by sulfonates or sulfates of fats or
    oils, by fatty acids, or by fatty alcs. The preferred precipitating agent is a
    C8-20 fatty alc. sulfate or a mixture of alcs. The best precipitating agent
    on the mol. weight and chemical characteristics of the protein.
```

ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

1967:29521 HCAPLUS

ACCESSION NUMBER:

DOCUMENT NUMBER: 66:29521

TITLE: Sulfonated urea-formaldehyde polymers

PATENT ASSIGNEE(S): Nopco Chemical Co.

Brit., 12 pp. SOURCE: CODEN: BRXXAA

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. _____

19661123 GB GB 1049096

PRIORITY APPLN. INFO.: US 19620927

The title polymers are formed by treating a urea-HCHO prepolymer with a sulfonated phenol at 83-5° and from the time of solution clearing until 4 hrs. after, depending on the desired d.p. Thus, HCHO (37% aqueous) 244.5, urea 90, and HCO2H 1 lb. were stirred at 100° until a resin (I) formed, and 348 lb. phenolsulfonic acid and 100 lb. water were added. The mixture was cooled to 75° and 100 lb. water was added. When the solution cleared, another 100 lb. water and 158 lb. ammonia were added. A tanning agent (II) was formed by adding hydroxysulfomethane Na salt 46.4, water 25, bis(2-hydroxy-5-octylphenyl)methane-ethylene-ethylene oxide copolymer 120, and CH2CO2H 10 lb. A condensate (III) was formed with o-cresolsulfonic acid (IV) by adding IV 576, water 100, and 30° Be. NaOH 166 lb. to a resin of the composition of I, neutralizing with 22 lb. $40\,^{\circ}$ Be. NaOH and diluting with 200 lb. water. Urea-modified III (V) was prepared by adding 30 lb. urea, heating at 85° for 2 hrs., and neutralizing with 200 lb. water and 22 lb. 30° Be. NaOH. A V condensate with a resin having a 4 HCHO-urea ratio was prepared and modified with dicyandiamide (VI) and aminoplast resins (Brit. 777,827) to give amphoteric condensates. III was treated with VI and lignosulfate to give an amphoteric product (VII). These condensates were used with sulfated sperm oil to retan chrome pretanned leather, and gave full, tight-grained, white-bleached leathers with good resistance to light discoloration. The best penetration and fat liquoring was given by V. II and VI-modified IV condensate (VIII) were used as pretanning agents. II gave a fuller, softer, and more lightfast leather, and VIII gave quicker and more complete tanning-agent penetration and better tensile strength. VII was used to replace vegetable exts. in the retannage of chrome pretanned hides, giving a tight, solid grain. These condensates can be used in preparing garment, shoe, glove, suede, and mech. leathers.

ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1965:15741 HCAPLUS

DOCUMENT NUMBER: 62:15741 ORIGINAL REFERENCE NO.: 62:2878c-e

TITLE: The influence of resin components on the bonding

properties of polychloroprene adhesives

AUTHOR (S): Fischer, W.

CORPORATE SOURCE: Forschungsinst. Schuhherstellung, Pirmasens, Germany

SOURCE: Adhaesion (1964), 8(9), 356-60

CODEN: ADHEA2; ISSN: 0001-8198

DOCUMENT TYPE: Journal LANGUAGE: German

Adhesives based on Neoprene AC, compounded as usual and mixed with 40% of different resins were used to cement leather to rubber, after which the strength of the bond was tested at once, again after 3 days, and after aging for 3 weeks at 40°. Leathers containing .apprx.18% extractable sulfated oils also were cemented to determine the effect of oil on the adhesive after aging. Terpene-phenol resins (I) and alkylphenol resins (II) gave poor results as a rule. Good adhesion was found with 1:1 mixts. of I with coumarone-indene resin or with a rosin derivative Addition of chlorinated

rubber

to I or II improved adhesion. Oils in the leather affected bonding, but only if the extractable oil was relatively high. In general, results with <code>sperm</code> and cod oils were unsatisfactory; best results were with castor, tea seed, or shark oils. Good leather, even waterproof, can now be made with <8% extractable oil so that cementing trouble can be minimized. The best plasticizers were coumarone resins and <code>lignosulfonates</code> when used in the synthetic rubber Buna Huels 170 extended with 37.5% and with 50% oil. Tables show bonding strengths. The results are considered to be preliminary.

L6 ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1952:15909 HCAPLUS

DOCUMENT NUMBER: 46:15909

ORIGINAL REFERENCE NO.: 46:2759i,2760a-b

TITLE: β -Aroylacrylic acids and salts as fungicides

INVENTOR(S): Papa, Domenick; Schwenk, Erwin

PATENT ASSIGNEE(S): Schering Corp.

DOCUMENT TYPE: Patent LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
US 2562208 19510731 US

AΒ The following compds. of the type RCOCH: CHCO2H, where R is an aryl or substituted aryl radical, are prepared by reaction of the hydrocarbon or its derivative with (:CHCO)20 and AlCl3 in a nonpolar solvent (R given): Ph, m. 98-9° (hydrate, m. 60-1°); p-ClC6H4 (I), m. 153.7-4.7°; p-BrC6H4 (II), m. 159-60°; p-IC6H4, m. 186-6.5°; p-MeC6H4, m. 137.5-8.5°; p-iso-PrC6H4, m. 103-3.5°; 2,5-Me2C6H3, m. 89-90°; 2,4-Me2C6H3, m. 113-14°; 2-thienyl, m. 152-3°; p-HOC6H4, m. 196.5-7.5° (cf. Bogert, C.A. 19, 982); 2-Me-4-HOC6H3, m. 172-3°; p-AcNHC6H4, m. 242-4°; m-O2NC6H4, m. 190-2°; p-MeO-C6H4, m. 138-9°; p-EtOC6H4, m. 184.5-5.5°; 2,4, 6-Me-(HO)(Me2CH)C6H2, m. 145.4-6.5°; 5,6,7,8-tetrahydro-2-naphthyl, m. 146.5-7.5°; and p-cyclohexylphenyl, m. 182-3°. Oxidation of II with fuming HNO3 gives the 4,3-Br(O2N)-C6H3 derivative, m. 167-8°. These acids or their metal salts, especially the Zn salts, are useful in combating intestinal infections. Powder compns. or vanishing creams containing 2-5% of the Zn salts, e.g. the Zn salt of I 2, qlyceryl monostearate 17, spermaceti 5, lanolin 3, mineral oil 4, and H2O 71% by weight, are suitable as fungistatic prepns.

L6 ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1916:2535 HCAPLUS

DOCUMENT NUMBER: 10:2535

ORIGINAL REFERENCE NO.: 10:467g-i,468a-i,469a-i,470a

TITLE: A new oxidation method. II. Action of aldehydes on

hydramines of the pyrrolidine and piperidine series

AUTHOR(S): Hess, K.; Merck, F.; Uibrig, Cl.

CORPORATE SOURCE: Univ. Freiburg i/Br.

SOURCE: Ber. (1915), 48, 1886-906

DOCUMENT TYPE: Journal LANGUAGE: Unavailable GI For diagram(s), see printed CA Issue.

AB cf. C. A. 8, 934. The conversion of sec-hydramines of the pyrrolidine series, NH.CH2.CH2.CH2.CHCHROH, into tertiary aminoketones, MeN.CH2.CH2.CH2.CHCOR, by HCHO has been extended to hydramines with primary alc. groups and to aldehydes other than HCHO. The 1st product is doubtless an aldehyde-ammonia addition product, HOCH2N.CH2.CH2-CH2.CHCHROH; at a higher temperature the CHOH group is oxidized and the >NCHOH-simultaneously reduced to >NCH2-. 1-[α-Pyrryl[-2-ethanol, b0.013]

95-9°, b0.048 104-6°, b15 138-42° (appreciable decomposition), is obtained in 6.2 g. yield when 75 cc. of an Et2O solution of

12

g. Mg and 60 g. EtBr is treated with 33 g. pyrrole in 20 cc. cold Et2O, then with 50 cc. C6H6, freed from most of the Et2O in vacuo, heated to 40-50°, slowly treated with 22 g. ethylene oxide in 50 cc. C6H6, (the reaction being so regulated that the solution is kept gently boiling), heated 2-3 hrs. at 100-10°, the C6H6 layer decanted off, the suspension of basic Mg salts repeatedly shaken with Et20, faintly acidified with dilute H2SO4, again extracted 2-3 times with 30-cc. portions of Et2O, the C6H6-Et2O exts. shaken with 50 cc. H2O, dried with potash, evaporated in vacuo, taken up in 30 cc. Et20, freed from tar by addition of gasoline (b. 45°) until no more dark particles sep., and distilled in a high vacuum in H; it is very difficultly volatile with steam; its aqueous solution is neutral to litmus; in the air it gradually turns brown and after a time deposits a solid resinous mass; it has a characteristic pyrrole odor. When 2.89 g. in 10 cc. AcOH are shaken in H with 1.0-1.5 g. Pt sponge, 4 atoms H are absorbed in 18-20 hrs.; at the same time there is some esterification. Accordingly, after filtering the Pt and washing to neutral reaction, the filtrate is treated with 20 cc. HCl, concentrated on the H2O bath to a thick syrup to saponification the ester and resinify any

pyrrole, taken up in 30 cc. concentrated HCl, allowed to stand with 3 g. Sn foil

until the latter is dissolved, diluted with 400 cc, H2O, freed from Sn with H2S (which also brings down the pyrrole resin), concentrated, supersatd. with alkali and repeatedly extracted with CHCl3; there is thus obtained 1.5-2.1 g. 1-[α -pyrrolidyl]-2-ethanol, b0.03678-80°, strongly refractive viscous oil of a disagreeable sperm-like odor, eagerly absorbs CO2 from the air; 1.4 g. in 6 cc. H2O, acidified with HCl, heated 4 hrs. at 115-20° with 2 cc. of 40% HCHO, gives the compound MeN.CH2.CH2.CH2-CH-CH2CHO, mobile refractive oil of a narcotic but unpleasantly penetrating odor, b15-6 79-80°, soluble in cold H2O and partially separating on warming, reduces cold NH3-AgNO3, yields a picrate, indistinct crystals from alc., sinters 177°, m. 181°. If 1 g. of the alc. in 5 cc. H (without HCl) is heated 3 hrs. at 110-24° with 1 cc. of 40% HCHO, the product is the tertiary hydramine base, MeN.CH2.CH2.CH2.CH2CH2OH, b14 110-2° viscous oil of fainter odor than the secondary base; yield 0.5 g. When 13 g. α,α' picolylethanol in 50 cc. hot alc. are slowly poured upon 41 g. Na, then treated with 450 cc. alc. in small portions, heated 45 min. at 130-40°, treated with 210 g. cold concentrated HCl, filtered from the NaCl, concentrated in vacuo, taken up in 30 cc. of 40% NaOH, shaken, 2-3 times with 20 cc. CHCl3 dried with potash, evaporated in vacuo at room temperature

and

rubbed with Et20 in ice-NaCl, the syrup partially solidifies, yielding 5 g. of the α -form of 1-[α , α '-picolidyl]-2-ethanol, polygonal tables from Et20, having a fatty luster when dry, m. 99°, b21 112-20°. The mother liquors on fractionation yield 2 g. of a liquid β -form, b22 115-7°, viscous basic oil, together with by-products, b17 65-98°, from which was isolated $\alpha\text{-methyl-}\alpha\text{'-ethylpiperidine}.$ The above $\alpha\text{-form}$ and HCHO in HCl at 137-40° quant. give the compound MeN.CHMe.CH2-CH2.CH2.CHCH2CHO(a), b18 84-5.5-°, strongly basic oil of narcotic odor, produces violent headaches when inhaled, becomes yellowish on long standing in corked tubes, soluble in H2O in all proportions and partially separated from not too dilute solns. on warming, easily volatile with steam, reduces NH3-AgNO3 on gentle warming, Fehling solution almost not at all on boiling, yields an oily phenylhydrazone solidifying to needles; picrate, prisms and tables from alc., m. 178°; with NH2OH the aldehyde regenerates the sec-hydramine base; at the same time HCHO is formed. the same way, 2.5 g. of the β -form. of the hydramine with HCHO gives 1.3 g. of an isomeric aldehyde, C9H17ON, b21 85-7°; picrate, m. turbid 1.35°, clear 145-6°. From 10 g. 1[α -piperidyl]-2-ethanol heated 4 hrs. at 120-5% with somewhat more than the calculated amount of HCHO in faintly acid solution is obtained 9.5-10

q. of 1- $[\alpha-N-methylpiperidyl]-2-ethanol, mobile oil, b19$ 82-4°, does not become. colored on standing, soluble in cold H2O, partially seps. on warming, has the typical narcotic, alkaloidal odor of hygrine and related compds., reduces NH3-AgNO3 on gentle warming but Fehling solution only faintly on boiling. Picrate, prisms from alc., sinters 150°, m. turbid 154°, clear 158°. From 5 g. of $1-[\alpha-pyrrolidyl]-1-ethanol$ and HCHO is obtained 4.7 g. of the ketone, C7H13ON, mobile volatile oil, b26 56-7°; picrate, sinters 172°, m. 174-5°. In the same way, 2 g. of the hydramine in 4 g. H2O and 1 g. concentrated HCl, heated 3 hrs. at 100-5° with 1.4 g. AcH, gives 0.6 g. of the ketone EtN.CH2.CH2.CH2.CHAc, b17 68-70°, while 2.6 g. of the hydramine, 12 cc. alc., 2.6 g. concentrated HCl and 2.5 g. BzH heated 4 hrs. at 120° yields 2. 1 g. of the benzyl compound C13H17ON, b21 139-41°; picrate, sinters 160°, m. turbid 163°, clear 166°. From 100 g. butyrylpyrrole (obtained in 123 g. yield from C4H4NMgBr (from 125 g. pyrrole) and PrCOCl by Oddo's method), reduced with 285 g. Na and 2 l. alc., is obtained 22-4 g. of $I-[\alpha-pyrrolidyl]-I-butanol, b0.14 67-9°, b19 102-4°,$ seps. from petr. ether (b. below 50°) in needles, m. about 60°; 6 g. in. 12 cc. H2O and concentrated HCl, heated 4 hrs. at 125-30° with 4.8 g. of 40% HCHO, gives the ketone C9H17ON (b), b11 83-5° (b35 83-5° is also given), partially soluble in cold, almost wholly insol. in warm H2O easily volatile with steam, reduces warm NH3-AgNO3; when it is boiled with dilute HCl there distils over a N-free substance, neutral to litmus, of aromatic and aldehyde odor, swimming on the H2O in oily drops. The distillate reduces warm NH3-AgNO3. The ketone with NH2OH regenerates the original butanol. Picrate, prismatic rodlets from alc., m. turbid 103°, clear 110°. Na and alc. do not attack the ketone; Na-Hq in H2O, kept neutral to faintly acid with HCl, partially reduces it to the tertiary hydramine. 1-[α-Piperidyl]-2propanol, b22-3 136-40°, is obtained in 7.2 g. yield from 20.8 g. of the pyridyl compound, b18 112-5° (obtained in 3-5% yield from picoline and AcH), or practically quant. from the pyridyl compound with H and Pt sponge in AcOH in 15 hrs.; 7.2 g., heated 4 hrs. at 115-28° with 5 g. of 40% HCHO, 5 cc. HCl and 3 cc. H2O, gives 3.5 g. of the ketone C9H17ON, b19 82-4° (slight decomposition), b738 210° (Only slightly increased decomposition), does not become colored even on long standing in corked tubes. Chloroaurate, prismatic columns from alc.-petr. ether, slowly sinters 100°, m. turbid 115-6°, clear 139°. Picrate, bright yellow prismatic needles from alc., sinters 148, ° softens 155°, m. turbid 160-1°. The ketone is apparently identical with Piccinini's isomethylpelletierine (Rend. accad. Lincei, 8, II, 176(1899)), but the latter has not been described with sufficient exactness to make this certain. That aldehyde-ammonias undergo intermol. oxidations, like the intramol. oxidation assumed for the hypothetical intermediate product in the above reactions, is indicated by the Plochl-Leuckhart reaction, whereby aldehydes; and ketones heated with HCO2NH4 yield primary, secondary and tertiary amine bases. In the alkylation of NH3 by HCHO, the reaction is assumed to be as follows: $>NH + HCHO \rightarrow >NCH2OH \rightarrow$ >NMe + HCO2H, the HCO2H yielding the 2nd Me group: > NMe + HCHO + HCO2H → -NMeCH2OH + HCO2H → >NMe2 + CO2, etc., HCO2H is more easily oxidized to CO2 than-CHOH-to-CO-in the above intramol. oxidations, for 2.6 g. $1-[\alpha-pyrrolidyl]-1-propanol$ in 6 cc. H2O, heated 4-5 hrs. at 110-5° with 1 g. HCO2H and 1.8 g. of 40% HCHO, gives 1.3-1.5 g. of the hydramine base, MeN.CH2.-CH2.-CH2.CHCH(OH)Et, b14-5 83°, less soluble in warm than in cold H2O. Picrate, long needles of microscopic rectangular prisms and rhombs, sinters 150°. m. 153-4°. In contrast with the ease with which the group-HOCH.N <loses O. it was found that the group >NCH2-easily takes up O with formation of aldehyde and a lower alkylated amine: $>NCH2-+ O \rightarrow$

>NCH(OH) \rightarrow > NH + -CHO. Thus, when, according to Luboldt (Arch. Pharm. 236, 22 (1898)), scopoline is demethylated by treatment with the amount of KMnO4 calculated for oxidation to CO2, HCHO is formed and the yield

of

demethylated product, norscopoline, is minimal, whereas if only 1 atom of O is used the yield is almost quant.: the reaction may therefore be represented thus: C7H10(NMe)O2 + O \rightarrow C7H10(NCH2OH)O2 \rightarrow C7H10-(NH)O2 + HCHO. The action of NH2OH on (a) and (b) shows that the oxidation of the hydramine bases to the aminoketones and -aldehydes may also be reversed; it is believed that the mechanism of this reaction may be represented thus: (R = -N.CH2.CH2.CH2.CH-) for (b):MeRCOPr + H2O.dblarw.MeRC(OH)2Pr.dblarw. HOCH2RCH(OH)Pr.dblarw. HRCH(OH)Pr + HCHO.

=> d ibib abs 1-19

L6 ANSWER 1 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2005:141200 HCAPLUS

DOCUMENT NUMBER:

142:254568

TITLE:

Methods and compositions for increasing the efficacy

of biologically-active ingredients such as antitumor

agents

INVENTOR(S):

Windsor, J. Brian; Roux, Stan J.; Lloyd, Alan M.;

Thomas, Collin E.

PATENT ASSIGNEE(S):

Board of Regents, the University of Texas System, USA

SOURCE:

PCT Int. Appl., 243 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PA	PATENT NO.									APPLICATION NO.						DATE			
	2005	72 2005021			0017					20021016									
							WO 2003-US32667						20031016						
WO	2005	2005014777				A3 200													
	W:	ΑE,	AG,	AL,	AM,	AT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,		
		CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	GE,		
		GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	ΚP,	KR,	KZ,	LC,	LK,		
		LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NI,	NO,	NZ,		
		OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,	ТJ,	TM,		
								US,								•	•		
	RW:							SD,								AZ,	BY,		
								AT,											
								IT,											
								GA,											
CA	AA 20050217								20031016										
EP	EP 1576150					A2 20050921			EP 2003-816736						20031016				
EP	1576	150			A3		2005	1102											
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
								MK,											
PRIORIT	Y APP				·	•	•	•					03P				016		
													667						
AB Th	e inv	enti	on p	rovi	des r	neth	ods	and o											

AB The invention provides methods and compns. for modulating the sensitivity of cells to cytotoxic compds. and other active agents. In accordance with the invention, compns. are provided comprising combinations of ectophosphatase inhibitors and active agents. Active agents include antibiotics, fungicides, herbicides, insecticides, chemotherapeutic agents, and plant growth regulators. By increasing the efficacy of active agents, the invention allows use of compns. with lowered concns. of active ingredients.

L6 ANSWER 2 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2004:101103 HCAPLUS

DOCUMENT NUMBER:

140:150613

TITLE:

Waterproofing agents from naturally occurring high

molecular weight esters for porous construction

materials

INVENTOR (S):

PATENT ASSIGNEE(S):

Pynsent, Anthony Allen; Susic, Michael Cooee Biosciences Limited, Australia

SOURCE:

PCT Int. Appl., 50 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

1

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

```
WO 2004011
    PATENT NO.
                                     APPLICATION NO. DATE
                     ----
    WO 2004011391 A1 20040205 WO 2003-AU963 20030730 WO 2004011391 C1 20040408
       W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
           CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
           GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
       BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.:
                                     AU 2002-950459 A 20020730
                                      AU 2002-950460
                                                       A 20020730
                                      AU 2003-900472 A 20030204
AU 2003-902375 A 20030516
```

A waterproofing or repelling agent comprising naturally occurring high AΒ mol. weight esters, selected from the group consisting of wool grease, bees wax, carnauba wax, spermaceti wax and the like, a carboxylic acid, and a hydrocarbon solvent. The waterproofing agent may be used on porous building products such as timber and masonry. The waterproofing agent may also be use to repel water from road bases to assist in stabilization of road bases formed from particulate materials. The waterproofing agent may also include preservatives or termite repelling agents to assist in the preservation of timber.

REFERENCE COUNT:

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

5

ACCESSION NUMBER: 2003:749402 HCAPLUS

DOCUMENT NUMBER:

140:39391

TITLE:

ESP13.2, a member of the β -defensin family, is a

macaque sperm surface-coating protein

involved in the capacitation process

AUTHOR (S): '

Yudin, Ashley I.; Tollner, Theodore L.; Li, Ming-Wen; Treece, Cathy A.; Overstreet, James W.; Cherr, Gary N.

CORPORATE SOURCE:

Department of Obstetrics and Gynecology, Division of Reproductive Biology, Bodega Marine Laboratory,

University of California, Davis, Davis, CA, 94923, USA

Biology of Reproduction (2003), 69(4), 1118-1128 SOURCE:

PUBLISHER:

CODEN: BIREBV; ISSN: 0006-3363 Society for the Study of Reproduction

DOCUMENT TYPE:

Journal

LANGUAGE:

English

Female macaques produced isoantibodies to a limited number of sperm surface proteins following immunization with sperm components released by phosphatidylinositol-specific phospholipase C (PI-PLC). Washed, acrosome-intact, fixed sperm injected into rabbits elicited a major immune response to one of the same PI-PLC-released

proteins, which was shown to be a sperm surface-coating protein. After purification and digestion of the qlycoprotein, four peptides were analyzed for amino acid sequence, and all had 100% homol. with an epididymal secretory protein, ESP13.2, reported previously to be a small, cationic-rich peptide and a member of the β -defensin family. Antibodies to purified ESP13.2 recognized a number of protein bands on Western blots of nonreduced PI-PLC-released sperm components and nonreduced whole-sperm exts. After chemical disulfide reduction, only a single, broad band from 31 to 35 kDa was recognized by anti-ESP13.2 antibodies. Indirect immunofluorescence showed ESP13.2 over the entire surface of ejaculated macaque sperm. Fluorescence was only slightly reduced after sperm were washed through 80% Percoll. A 24-h incubation in capacitating medium significantly reduced the amount of ESP13.2 over the head and midpiece, whereas exposure of the incubated sperm to dbcAMP and caffeine (capacitation activators) resulted in almost complete loss of ESP13.2 from the sperm surface. After activation, ESP13.2 was the primary component released into the medium as judged electrophoretically. Lignosulfonic acid, a potent inhibitor of macaque fertilization in vitro, completely blocked release of ESP13.2 from the sperm surface, even following treatment with activators. These findings suggest that the β -defensin, ESP13.2, has a function in the capacitation of macaque spermatozoa and may modulate sperm surface-receptor presentation at the time of fertilization.

REFERENCE COUNT:

61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 4 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:551175 HCAPLUS

DOCUMENT NUMBER:

139:106471

TITLE:

SOURCE:

Sulfonated compounds as barrier contraceptives

Cherr, Gary N.; Salinas, Edward R.

PATENT ASSIGNEE(S):

The Regents of the University of California, USA

U.S. Pat. Appl. Publ., 20 pp. CODEN: USXXCO

DOCUMENT TYPE:

INVENTOR(S):

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.					D	DATE		APPLICATION NO.					DATE			
US 20	US 2003134803				A1 20030717			• 1	 US 2	 002-	 7690:	20020213				
WO 20	WO 2003059197				A2 20030724			1	WO 2	003-1	US13:	20030114				
WO 20	WO 2003059197				A3 20040226											
W	: AE,	AG,	AL,	AM,	ΑT,	ΑU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,
	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FΙ,	GB,	GD,	GE,	GH,
	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	ΚP,	KR,	ΚZ,	LC,	LK,	LR,
	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,
	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
	UA,	ŪĠ,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW						
R	W: GH,	GM,	KΕ,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
	KG,	ΚZ,	MD,	RU,	TJ,	TM,	AT,	ΒE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,
•	FΙ,	FR,	GB,	GR,	HU,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,	SI,	SK,	TR,	BF,
	ВJ,	CF,	CG,	CI,	CM,	GΑ,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG	
PRIORITY APPLN. INFO.: US 2002-349144P P											P 20	20020115				
US 2002-76902 A 2002023													213			
AR This	invent	ion i	nrow	29hi	met	hode	COI	nnne	an	4						

This invention provides methods, compns. and contraceptive AB devices that use sulfonated compds. that interact with sperm to inhibit fertilization. Natural contraceptive methods, compns. and contraceptive devices are also included. These natural contraceptives use sulfonated compds. isolated from natural sources. Methods, compns. and contraceptive devices are also provided that use a lignin and/or a derivative thereof. The effect of

lignosulfonic acid (LSA) on sperm from adult male cynomolgus macaques was determined LSA inhibited sperm-zona binding by 82.5% when added to sperm prior to washing through Percoll, and overnight incubation. The inhibitory effect of LSA on zona binding following pre- and post-capacitation treatments did not differ significantly although post-capacitation treatment consistently resulted in slightly greater inhibition.

ANSWER 5 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN L6

2003:70433 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 139:3026

TITLE: Real-time observations of individual macaque

> sperm undergoing tight binding and the acrosome reaction on the zona pellucida

AUTHOR (S): Tollner, Theodore L.; Yudin, Ashley I.; Cherr, Gary

N.; Overstreet, James W.

CORPORATE SOURCE: Division of Reproductive Biology, University of

California, Davis, CA, 95616, USA

SOURCE: Biology of Reproduction (2003), 68(2), 664-672

CODEN: BIREBV; ISSN: 0006-3363

PUBLISHER: Society for the Study of Reproduction

DOCUMENT TYPE: Journal English LANGUAGE:

Changes in binding affinity, acrosomal status, and motility of living sperm on the zona pellucida were for the first time in any mammalian species directly observed and analyzed with video microscopy. A single zona was air-dried and rehydrated on a microscope slide, and a

coverslip supported by glass beads was added. Capacitated sperm were added together with Alexa-SBTI, a probe for acrosin that can detect the acrosome reaction. The heads of loosely attached sperm oscillated on the zona and the flagella beat sym. with a sigmoid-shaped waveform. Tight binding was observed after 16 s as the sperm head became fixed in place on the zona. The shape of the flagellar beat simultaneously shifted to a more rigid, C-shaped waveform. The first signs of the acrosome reaction were detected within 11 s of tight binding. Rapid flushing removed approx. 65% of sperm that were loosely

attached but only 2% of those that were tightly bound. In the 2 min following the onset of tight binding, the lateral displacement of the flagellum increased by approx. 30% and the beat frequency decreased by 25%. Lignosulfonic acid (LSA) inhibited loose

sperm attachment and the development of tight binding. LSA had no effect on the time of the acrosome reaction following tight binding or on changes in motility that followed tight binding. These data suggest that LSA affects the initial attachment or docking of sperm to the zona, a step that may align or recruit one or more specific zona receptors

to be responsible for mediating the acrosome reaction. REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 6 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:909288 HCAPLUS

DOCUMENT NUMBER: 138:331859

TITLE: Lignosulfonic acid blocks in vitro

> fertilization of macaque oocytes when sperm are treated either before or after capacitation

AUTHOR (S): Tollner, Theodore L.; Overstreet, James W.; Li, Ming

W.; Meyers, Stuart A.; Yudin, Ashley I.; Salinas,

Edward R.; Cherr, Gary N.

CORPORATE SOURCE: Division of Reproductive Biology, Department of

Obstetrics and Gynecology, University of California,

Davis, CA, 94923, USA

Journal of Andrology (2002), 23(6), 889-898 CODEN: JOAND3; ISSN: 0196-3635 SOURCE:

PUBLISHER: American Society of Andrology, Inc.

DOCUMENT TYPE: Journal LANGUAGE: English

Lignin-derived macromols. (LDMs) are biol. active compds. that affect a variety of cell-to-cell interactions including the inhibition of fertilization and embryo development in a number of nonmammalian species. The effect of lignosulfonic acid (LSA), a highly sulfonated LDM, on cynomolgus macaque sperm-oocyte interaction was evaluated with a zona pellucida binding assay and by in vitro fertilization (IVF). Sperm were treated with LSA (1.5 mg/mL) either before washing or after capacitation. Capacitation included centrifugation through 80% Percoll followed by 2 consecutive washes with medium, overnight incubation, and activation with dibutyryl cAMP and caffeine. The zona binding assay was performed using immature oocytes that had adhered to the center of glass "binding chambers.". The number of capacitated sperm that attached to the zona over a 3-min period was recorded. Sperm attachment was significantly inhibited by LSA as compared to controls whether treatment occurred after capacitation (92.5%; P <.001) or before washing (82.5%; P <.001). When sperm were treated similarly with fucoidin, a sulfated polysaccharide known to inhibit sperm-oocyte interaction, sperm-zona binding was significantly inhibited by postcapacitation treatment but not by prewash treatment. Treatment of sperm with LSA consistently blocked fertilization over 4 IVF cycles both before washing and after capacitation. Fertilization rate for controls was 65% ± 17%. No LSA-treated sperm were observed on the surface of lightly rinsed oocytes after 4 h of coincubation. Localization of biotinylated LSA showed labeling over the entire sperm surface with the greatest intensity observed over the head and midpiece. LSA treatment had no effect on the percentage of motile sperm or quality of sperm motility. Due to the antifertility properties of this nontoxic mol., LSA appears to have potential as a vaginal contraceptive.

REFERENCE COUNT:

THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 7 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN L6

53

ACCESSION NUMBER:

1984:12290 HCAPLUS

DOCUMENT NUMBER:

100:12290

TITLE:

Chemical oxidizability of organic components in water

AUTHOR (S):

Janicke, W.

CORPORATE SOURCE: SOURCE:

Fed. Rep. Ger. WaBoLu-Berichte (1983), (1), 114 pp.

CODEN: WBLBD6; ISSN: 0172-7702

DOCUMENT TYPE:

Journal

LANGUAGE:

German

The calculated COD values of 582 chemical compds. are compared to the COD values

determined exptl. by the Cr2072-, Cr2072- and Ag, and MnO4- methods.

ANSWER 8 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1981:133586 HCAPLUS

DOCUMENT NUMBER:

94:133586

TITLE:

Effects of a drilling fluid on the development of a

teleost and an echinoderm

AUTHOR (S):

Crawford, Richard B.; Gates, Jonathan D.

CORPORATE SOURCE: SOURCE:

Dep. Biol., Trinity Coll., Hartford, CT, 06106, USA Bulletin of Environmental Contamination and Toxicology

(1981), 26(2), 207-12

CODEN: BECTA6; ISSN: 0007-4861

DOCUMENT TYPE: .

Journal English

LANGUAGE:

The effects of a lignosulfonate-mud drilling fluid containing BaSO4 on the development of embryos of Fundulus heteroclitus (teleost) and Echinarachnius parma (echinoderm) were examined Fundulus Embryos developed normally through hatching in the presence of ≤10 ppm drilling

fluid, whereas Echinarachnius development was normal at ≤100 ppm. At higher concns., the drilling fluid affected the development and hatching of the embryos. Treatment of the **sperm** with drilling fluid had no significant effect on fertilization, whereas incubation of the eggs with drilling fluid at 10 and 1 ppt, prevented fertilization.

ANSWER 9 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1977:74868 HCAPLUS

DOCUMENT NUMBER:

TITLE:

AUTHOR (S):

CORPORATE SOURCE:

86:74868
Lipid and other nonpetrochemical raw materials
Scholnick, Frank
East. Reg. Res. Cent., Philadelphia, PA, USA
Surfactant Science Series (1976), 7, Pt. 1, 87-109 SOURCE:

CODEN: SFSSA5; ISSN: 0081-9603

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

AB A review, with 32 refs., of K and Na salts of fatty, rosin, and tall-oil

acids, Ca, ammonium, and Na lignosulfonates, sulfated fatty and tall-oil acids and their derivs., sulfated fatty and sperm-oil

alcs., and sulfated natural fats and oils useful as anionic surfactants.

ANSWER 10 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1970:438532 HCAPLUS

DOCUMENT NUMBER: 73:38532

TITLE: Recovery of proteins in waste water

Aktieselskapet Apothekernes Laboratorium for PATENT ASSIGNEE(S):

Specialpraeparater

Fr., 6 pp. SOURCE:

CODEN: FRXXAK

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE
FR 1581745 19690919 FR 19680730 19680730

Proteins contained in waste waters can be obtained by precipitation from acid AB solution The proteins are precipitated by sulfonates or sulfates of fats or

oils, by fatty acids, or by fatty alcs. The preferred precipitating agent is a C8-20 fatty alc. sulfate or a mixture of alcs. The best precipitating agent

on the mol. weight and chemical characteristics of the protein.

ANSWER 11 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1967:29521 HCAPLUS

DOCUMENT NUMBER: 66:29521

TITLE: Sulfonated urea-formaldehyde polymers

PATENT ASSIGNEE(S): Nopco Chemical Co.

SOURCE: Brit., 12 pp. CODEN: BRXXAA

DOCUMENT TYPE: Patent English LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

KIND DATE APPLICATION NO. DATE PATENT NO. GB 1049096 19661123 GB

PRIORITY APPLN. INFO.: US

The title polymers are formed by treating a urea-HCHO prepolymer with a sulfonated phenol at 83-5° and from the time of solution clearing until 4 hrs. after, depending on the desired d.p. Thus, HCHO (37% aqueous)

244.5, urea 90, and HCO2H 1 lb. were stirred at 100° until a resin (I) formed, and 348 lb. phenolsulfonic acid and 100 lb. water were added. The mixture was cooled to 75° and 100 lb. water was added. When the solution cleared, another 100 lb. water and 158 lb. ammonia were added. A tanning agent (II) was formed by adding hydroxysulfomethane Na salt 46.4, water 25, bis(2-hydroxy-5-octylphenyl)methane-ethylene-ethylene oxide copolymer 120, and CH2CO2H 10 lb. A condensate (III) was formed with o-cresolsulfonic acid (IV) by adding IV 576, water 100, and 30° Be. NaOH 166 lb. to a resin of the composition of I, neutralizing with 22 lb. 40° Be. NaOH and diluting with 200 lb. water. Urea-modified III (V) was prepared by adding 30 lb. urea, heating at 85° for 2 hrs., and neutralizing with 200 lb. water and 22 lb. 30° Be. NaOH. A V condensate with a resin having a 4 HCHO-urea ratio was prepared and modified with dicyandiamide (VI) and aminoplast resins (Brit. 777,827) to give amphoteric condensates. III was treated with VI and lignosulfate to give an amphoteric product (VII). These condensates were used with sulfated sperm oil to retan chrome pretanned leather, and gave full, tight-grained, white-bleached leathers with good resistance to light discoloration. The best penetration and fat liquoring was given by V. II and VI-modified IV condensate (VIII) were used as pretanning agents. II gave a fuller, softer, and more lightfast leather, and VIII gave quicker and more complete tanning-agent penetration and better tensile strength. VII was used to replace vegetable exts. in the retannage of chrome pretanned hides, giving a tight, solid grain. These condensates can be used in preparing garment, shoe, glove, suede, and mech. leathers.

ANSWER 12 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1965:15741 HCAPLUS

DOCUMENT NUMBER: 62:15741 ORIGINAL REFERENCE NO.: 62:2878c-e

TITLE: The influence of resin components on the bonding

properties of polychloroprene adhesives

AUTHOR (S): Fischer, W.

CORPORATE SOURCE: Forschungsinst. Schuhherstellung, Pirmasens, Germany

SOURCE: Adhaesion (1964), 8(9), 356-60

CODEN: ADHEA2; ISSN: 0001-8198

DOCUMENT TYPE: Journal LANGUAGE: German

Adhesives based on Neoprene AC, compounded as usual and mixed with 40% of different resins were used to cement leather to rubber, after which the strength of the bond was tested at once, again after 3 days, and after aging for 3 weeks at 40°. Leathers containing .apprx.18% extractable sulfated oils also were cemented to determine the effect of oil on the adhesive after aging. Terpene-phenol resins (I) and alkylphenol resins (II) gave poor results as a rule. Good adhesion was found with 1:1 mixts. of I with coumarone-indene resin or with a rosin derivative Addition of chlorinated rubber

to I or II improved adhesion. Oils in the leather affected bonding, but only if the extractable oil was relatively high. In general, results with sperm and cod oils were unsatisfactory; best results were with castor, tea seed, or shark oils. Good leather, even waterproof, can now be made with <8% extractable oil so that cementing trouble can be The best plasticizers were coumarone resins and minimized. lignosulfonates when used in the synthetic rubber Buna Huels 170 extended with 37.5% and with 50% oil. Tables show bonding strengths. results are considered to be preliminary.

ANSWER 13 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1952:15909 HCAPLUS

DOCUMENT NUMBER: 46:15909

ORIGINAL REFERENCE NO.: 46:2759i,2760a-b

TITLE: β -Aroylacrylic acids and salts as fungicides

INVENTOR(S): Papa, Domenick; Schwenk, Erwin

PATENT ASSIGNEE(S): Schering Corp. DOCUMENT TYPE: Patent LANGUAGE: Unavailable

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

US 2562208 19510731 US

AB The following compds. of the type RCOCH:CHCO2H, where R is an aryl or substituted aryl radical, are prepared by reaction of the hydrocarbon or its derivative with (:CHCO)20 and AlCl3 in a nonpolar solvent (R given): Ph, m. 98-9° (hydrate, m. 60-1°); p-ClC6H4 (I), m. 153.7-4.7°; p-BrC6H4 (II), m. 159-60°; p-IC6H4, m. 186-6.5°; p-MeC6H4, m. 137.5-8.5°; p-iso-PrC6H4, m. 103-3.5°; 2,5-Me2C6H3, m. 89-90°; 2,4-Me2C6H3, m. 113-14°; 2-thienyl, m. 152-3°; p-HOC6H4, m. 196.5-7.5° (cf. Bogert, C.A. 19, 982); 2-Me-4-HOC6H3, m. 172-3°; p-AcNHC6H4, m. 242-4°; m-O2NC6H4, m. 190-2°; p-MeO-C6H4, m. 138-9°; p-EtOC6H4, m. 184.5-5.5°; 2,4, 6-Me-(HO)(Me2CH)C6H2, m. 145.4-6.5°; 5,6,7,8-tetrahydro-2-naphthyl, m. 146.5-7.5°; and p-cyclohexylphenyl, m. 182-3°. Oxidation of II with fuming HNO3 gives the 4,3-Br(O2N)-C6H3 derivative, m. 167-8°. These acids or their metal salts, especially the Zn salts, are useful in combating intestinal infections. Powder compns. or vanishing creams containing 2-5% of the Zn salts, e.g. the Zn salt of I 2, glyceryl monostearate 17, spermaceti 5, lanolin 3, mineral oil 4, and H2O 71% by weight, are suitable as fungistatic prepns.

L6 ANSWER 14 OF 14 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1916:2535 HCAPLUS

DOCUMENT NUMBER: 10:2535

ORIGINAL REFERENCE NO.: 10:467g-i,468a-i,469a-i,470a

TITLE: A new oxidation method. II. Action of aldehydes on

hydramines of the pyrrolidine and piperidine series

AUTHOR(S): Hess, K.; Merck, F.; Uibrig, Cl.

CORPORATE SOURCE: Univ. Freiburg i/Br. SOURCE: Ber. (1915), 48, 1886-906

DOCUMENT TYPE: Journal LANGUAGE: Unavailable

12

GI For diagram(s), see printed CA Issue.

AB cf. C. A. 8, 934. The conversion of sec-hydramines of the pyrrolidine series, NH.CH2.CH2.CH2.CHCHROH, into tertiary aminoketones, MeN.CH2.CH2.CH2.CHCOR, by HCHO has been extended to hydramines with primary alc. groups and to aldehydes other than HCHO. The 1st product is doubtless an aldehyde-ammonia addition product, HOCH2N.CH2.CH2-CH2.CHCHROH; at a higher temperature the CHOH group is oxidized and the >NCHOH-simultaneously reduced to >NCH2-. 1-[α-Pyrryl[-2-ethanol, b0.013 95-9°, b0.048 104-6°, b15 138-42° (appreciable

decomposition), is obtained in 6.2 g. yield when 75 cc. of an Et2O solution of

g. Mg and 60 g. EtBr is treated with 33 g. pyrrole in 20 cc. cold Et20, then with 50 cc. C6H6, freed from most of the Et20 in vacuo, heated to 40-50°, slowly treated with 22 g. ethylene oxide in 50 cc. C6H6, (the reaction being so regulated that the solution is kept gently boiling), heated 2-3 hrs. at 100-10°, the C6H6 layer decanted off, the suspension of basic Mg salts repeatedly shaken with Et20, faintly acidified with dilute H2SO4, again extracted 2-3 times with 30-cc. portions of Et20, the C6H6-Et20 exts. shaken with 50 cc. H2O, dried with potash, evaporated in vacuo, taken up in 30 cc. Et20, freed from tar by addition of gasoline (b. 45°) until no more dark particles sep., and distilled in a high vacuum in H; it is very difficultly volatile with steam; its aqueous solution is neutral to litmus; in the air it gradually turns brown and after a time deposits a solid resinous mass; it has a characteristic pyrrole odor. When 2.89 g. in 10 cc. AcOH are shaken in H with 1.0-1.5 g. Pt

sponge, 4 atoms H are absorbed in 18-20 hrs.; at the same time there is some esterification. Accordingly, after filtering the Pt and washing to neutral reaction, the filtrate is treated with 20 cc. HCl, concentrated on the H2O bath to a thick syrup to saponification the ester and resinify any unattacked

pyrrole, taken up in 30 cc. concentrated HCl, allowed to stand with 3 g. Sn foil

until the latter is dissolved, diluted with 400 cc, H2O, freed from Sn with H2S (which also brings down the pyrrole resin), concentrated, supersatd. with alkali and repeatedly extracted with CHCl3; there is thus obtained 1.5-2.1 g. 1- $[\alpha$ -pyrrolidyl]-2-ethanol, b0.03678-80°, strongly refractive viscous oil of a disagreeable sperm-like odor, eagerly absorbs CO2 from the air; 1.4 g. in 6 cc. H2O, acidified with HCl, heated 4 hrs. at 115-20° with 2 cc. of 40% HCHO, gives the compound MeN.CH2.CH2.CH2-CH-CH2CHO, mobile refractive oil of a narcotic but unpleasantly penetrating odor, b15-6 79-80°, soluble in cold H2O and partially separating on warming, reduces cold NH3-AgNO3, yields a picrate, indistinct crystals from alc., sinters 177°, m. 181°. If 1 g. of the alc. in 5 cc. H (without HCl) is heated 3 hrs. at 110-24° with 1 cc. of 40% HCHO, the product is the tertiary hydramine base, MeN.CH2.CH2.CH2.CH2CH2OH, b14 110-2° viscous oil of fainter odor than the secondary base; yield 0.5 g. When 13 g. α,α' -picolylethanol in 50 cc. hot alc. are slowly poured upon 41 g. Na, then treated with 450 cc. alc. in small portions, heated 45 min. at 130-40°, treated with 210 g. cold concentrated HCl, filtered from the NaCl, concentrated in vacuo, taken up in 30 cc. of 40% NaOH, shaken, 2-3 times with 20 cc. CHCl3 dried with potash, evaporated in vacuo at room temperature

and

rubbed with Et2O in ice-NaCl, the syrup partially solidifies, yielding 5 g. of the α -form of 1-[α , α '-picolidyl]-2-ethanol, polygonal tables from Et2O, having a fatty luster when dry, m. 99°, b21 112-20°. The mother liquors on fractionation yield 2 g. of a liquid β -form, b22 115-7°, viscous basic oil, together with by-products, b17 65-98°, from which was isolated α -methyl- α '-ethylpiperidine. The above α -form and HCHO in HCl at 137-40° quant. give the compound MeN.CHMe.CH2-CH2.CH2.CHCH2CHO(a), b18 84-5.5-°, strongly basic oil of narcotic odor, produces violent headaches when inhaled, becomes yellowish on long standing in corked tubes, soluble in H2O in all proportions and partially separated from not too dilute solns. on warming, easily volatile with steam, reduces NH3-AgNO3 on gentle warming, Fehling solution almost not at all on boiling, yields an oily phenylhydrazone solidifying to needles; picrate, prisms and tables from alc., m. 178°; with NH2OH the aldehyde regenerates the sec-hydramine base; at the same time HCHO is formed. the same way, 2.5 g. of the β -form. of the hydramine with HCHO gives 1.3 g. of an isomeric aldehyde, C9H17ON, b21 85-7°; picrate, m. turbid 1.35°, clear 145-6°. From 10 g. 1-[α -piperidyl]-2-ethanol heated 4 hrs. at 120-5° with somewhat

more than the calculated amount of HCHO in faintly acid solution is obtained 9.5-10

g. of 1- $[\alpha-N-methylpiperidyl]$ -2-ethanol, mobile oil, b19 82-4°, does not become. colored on standing, soluble in cold H2O, partially seps. on warming, has the typical narcotic, alkaloidal odor of hygrine and related compds., reduces NH3-AqNO3 on gentle warming but Fehling solution only faintly on boiling. Picrate, prisms from alc., sinters 150°, m. turbid 154°, clear 158°. From 5 g. of $1-[\alpha-pyrrolidyl]-1-ethanol$ and HCHO is obtained 4.7 g. of the ketone, C7H13ON, mobile volatile oil, b26 56-7°; picrate, sinters 172°, m. 174-5°. In the same way, 2 g. of the hydramine in 4 g. H2O and 1 g. concentrated HCl, heated 3 hrs. at 100-5° with 1.4 g. AcH, gives 0.6 g. of the ketone EtN.CH2.CH2.CH2.CHAc, b17 68-70°, while 2.6 g. of the hydramine, 12 cc. alc., 2.6 g. concentrated HCl and 2.5 g. BzH heated 4 hrs. at 120° yields 2. 1 g. of the benzyl compound Cl3H17ON, b21 139-41°; picrate, sinters 160°, m. turbid

163°, clear 166°. From 100 g. butyrylpyrrole (obtained in 123 g. yield from C4H4NMgBr (from 125 g. pyrrole) and PrCOCl by Oddo's method), reduced with 285 g. Na and 2 l. alc., is obtained 22-4 g. of I-[α-pyrrolidyl]-I-butanol, b0.14 67-9°, b19 102-4°, seps. from petr. ether (b. below 50°) in needles, m. about 60°; 6 q. in. 12 cc. H2O and concentrated HCl, heated 4 hrs. at 125-30° with 4.8 g. of 40% HCHO, gives the ketone C9H17ON (b), b11 83-5° (b35 83-5° is also given), partially soluble in cold, almost wholly insol. in warm H2O easily volatile with steam, reduces warm NH3-AgNO3; when it is boiled with dilute HCl there distils over a N-free substance, neutral to litmus, of aromatic and aldehyde odor, swimming on the H2O in oily drops. The distillate reduces warm NH3-AgNO3. The ketone with NH2OH regenerates the original butanol. Picrate, prismatic rodlets from alc., m. turbid 103°, clear 110°. Na and alc. do not attack the ketone; Na-Hg in H2O, kept neutral to faintly acid with HCl, partially reduces it to the tertiary hydramine. 1- $[\alpha$ -Piperidyl]-2propanol, b22-3 136-40°, is obtained in 7.2 g. yield from 20.8 g. of the pyridyl compound, b18 112-5° (obtained in 3-5% yield from picoline and AcH), or practically quant. from the pyridyl compound with H and Pt sponge in AcOH in 15 hrs.; 7.2 g., heated 4 hrs. at 115-28° with 5 g. of 40% HCHO, 5 cc. HCl and 3 cc. H2O, gives 3.5 g. of the ketone C9H17ON, b19 82-4° (slight decomposition), b738 210° (Only slightly increased decomposition), does not become colored even on long standing in corked tubes. Chloroaurate, prismatic columns from alc.-petr. ether, slowly sinters 100°, m. turbid 115-6°, clear 139°. Picrate, bright yellow prismatic needles from alc., sinters 148, ° softens 155°, m. turbid 160-1°. The ketone is apparently identical with Piccinini's isomethylpelletierine (Rend. accad. Lincei, 8, II, 176(1899)), but the latter has not been described with sufficient exactness to make this certain. That aldehyde-ammonias undergo intermol. oxidations, like the intramol. oxidation assumed for the hypothetical intermediate product in the above reactions, is indicated by the Plochl-Leuckhart reaction, whereby aldehydes; and ketones heated with HCO2NH4 yield primary, secondary and tertiary amine bases. In the alkylation of NH3 by HCHO, the reaction is assumed to be as follows: $>NH + HCHO \rightarrow >NCH2OH \rightarrow$ >NMe + HCO2H, the HCO2H yielding the 2nd Me group: > NMe + HCHO + HCO2H \rightarrow -NMeCH2OH + HCO2H \rightarrow >NMe2 + CO2, etc., HCO2H is more easily oxidized to CO2 than-CHOH-to-CO-in the above intramol. oxidations, for 2.6 g. $1-[\alpha-pyrrolidyl]-1-propanol$ in 6 cc. H2O, heated 4-5 hrs. at 110-5° with 1 g. HCO2H and 1.8 g. of 40% HCHO, gives 1.3-1.5 g. of the hydramine base, MeN.CH2.-CH2.-CH2.CHCH(OH)Et, b14-5 83°, less soluble in warm than in cold H2O. Picrate, long needles of microscopic rectangular prisms and rhombs, sinters 150°. m. 153-4°. In contrast with the ease with which the group-HOCH.N < loses O. it was found that the group >NCH2-easily takes up O with formation of aldehyde and a lower alkylated amine: $>NCH2-+ O \rightarrow$ >NCH(OH)-→ > NH + -CHO. Thus, when, according to Luboldt (Arch. Pharm. 236, 22 (1898)), scopoline is demethylated by treatment with the amount of KMnO4 calculated for oxidation to CO2, HCHO is formed and the yield

demethylated product, norscopoline, is minimal, whereas if only 1 atom of O is used the yield is almost quant.: the reaction may therefore be represented thus: C7H10(NMe)O2 + O \rightarrow C7H10(NCH2OH)O2 \rightarrow C7H10-(NH)O2 + HCHO. The action of NH2OH on (a) and (b) shows that the oxidation of the hydramine bases to the aminoketones and -aldehydes may also be reversed; it is believed that the mechanism of this reaction may

be represented thus: (R = -N.CH2.CH2.CH2.CH-) for (b):MeRCOPr + H2O .dblarw.MeRC(OH)2Pr.dblarw. HOCH2RCH(OH)Pr .dblarw. HRCH(OH)Pr + HCHO.

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               I OR 588-59-0/BI OR 65595-90-6/BI OR 6994-45-2/BI OR 79975-37-4/
               BI OR 80501-09-3/BI OR 8062-15-5/BI OR 8068-05-1/BI OR 82-76-8/B
               I OR 84215-10-1/BI OR 85353-17-9/BI OR 9017-33-8/BI)
=> d scan
L7
     19 ANSWERS
                  REGISTRY COPYRIGHT 2006 ACS on STN
IN
     Pyridine, 4-ethenyl-, homopolymer, 4-methylbenzenesulfonate (9CI)
MF
     C7 H8 O3 S . x (C7 H7 N)x
     CM
          1
             Me
```

CM 2

CM 3

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):18

IN Benzene, 1-methoxy-4-(1E)-1-propenyl-, (E)-, homopolymer (9CI)

MF (C10 H12 O)x

CI PMS

CM 1

Double bond geometry as shown.

L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN Lignosulfonic acid (9CI)

MF Unspecified

CI PMS, COM, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN 1-Naphthalenesulfonic acid, 8-(phenylamino) - (9CI)

MF C16 H13 N O3 S

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN 1-Naphthalenesulfonamide, N-(6-aminohexyl)-5-chloro- (9CI)

MF C16 H21 C1 N2 O2 S

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

```
IN Ethenesulfonic acid, homopolymer (9CI)
```

MF (C2 H4 O3 S)x

CI PMS, COM

CM 1

 $H_2C = CH - SO_3H$

L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN 1-Tetradecanesulfonic acid, sodium salt (6CI, 7CI, 8CI, 9CI)

MF C14 H30 O3 S . Na

CI COM

 $HO_3S-(CH_2)_{13}-Me$

Na

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN 2-Naphthalenesulfonamide, N-(6-aminohexyl)-5-bromo- (9CI)

MF C16 H21 Br N2 O2 S

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer
with 2-propenenitrile (9CI)

MF (C7 H13 N O4 S . C3 H3 N)x

CI PMS

CM 1

$$\begin{array}{c} \text{O} \\ || \\ \text{NH-C-CH} \\ | \\ \text{Me-C-CH}_2 - \text{SO}_3 \text{H} \\ | \\ \text{Me} \end{array}$$

CM 2

 $H_2C \longrightarrow CH - C \longrightarrow N$

L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN Benzenemethanesulfonic acid, α, α -diphenyl- (9CI)

MF C19 H16 O3 S

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN Benzene, 1,1'-(1,2-ethenediyl)bis- (9CI)

MF C14 H12

CI COM

Ph-CH-Ph

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN 2-Naphthalenesulfonamide, N-(6-aminohexyl)-5-chloro- (9CI)

MF C16 H21 C1 N2 O2 S

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- IN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer
 with ethenylbenzene (9CI)
- MF (C8 H8 . C7 H13 N O4 S)x
- CI PMS, COM

CM 1

CM 2

 $H_2C = CH - Ph$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- IN Naphthalenesulfonic acid, polymer with formaldehyde (8CI, 9CI)
- MF (C10 H8 O3 S . C H2 O)x
- CI PMS, COM

CM 1

D1-SO3H

CM 2

 $H_2C = 0$

- L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
- IN 4H-1-Benzopyran-4-one, 7-[[6-0-(6-deoxy- α -L-mannopyranosyl)- β -D-glucopyranosyl]oxy]-2,3-dihydro-5-hydroxy-2-(3-hydroxy-4-methoxyphenyl)-, (2S)- (9CI)
- MF C28 H34 O15
- CI COM

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN Benzenesulfonic acid, polymer with formaldehyde (9CI) MF

(C6 H6 O3 S . C H2 O) x

CI PMS, COM

> CM 1

CM

$H_2C = 0$

L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, homopolymer IN (9CI)

MF (C7 H13 N O4 S)x

PMS, COM CI

> CM 1

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L7 19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN

IN Lignin, alkali (9CI)

Unspecified MF

PMS, COM, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

19 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN Benzene, propyl- (8CI, 9CI) L7

IN

MF C9 H12

CI COM

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> d tot

L7 ANSWER 1 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN

RN **85353-17-9** REGISTRY

Entered STN: 16 Nov 1984

2-Naphthalenesulfonamide, N-(6-aminohexyl)-5-bromo- (9CI) (CA INDEX NAME) CN

OTHER NAMES:

N-(6-Aminohexyl)-5-bromo-2-naphthalenesulfonamide

FS 3D CONCORD

C16 H21 Br N2 O2 S MF

CI COM

STN Files: CA, CAPLUS, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)

3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 2 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN

RN 84215-10-1 REGISTRY

ED Entered STN: 16 Nov 1984

CN 2-Naphthalenesulfonamide, N-(6-aminohexyl)-5-chloro- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(6-Aminohexyl)-5-chloro-2-naphthalenesulfonamide

CN W 9

FS 3D CONCORD

MF C16 H21 Cl N2 O2 S

CI COM

LC STN Files: BIOSIS, CA, CAPLUS, TOXCENTER, USPATFULL

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10 REFERENCES IN FILE CA (1907 TO DATE)

10 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 3 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN

RN 80501-09-3 REGISTRY

ED Entered STN: 16 Nov 1984

CN Benzenesulfonic acid, polymer with formaldehyde (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Formaldehyde, polymer with benzenesulfonic acid (9CI)

OTHER NAMES:

CN Benzenesulfonic acid-formaldehyde copolymer

DR 35312-80-2

MF (C6 H6 O3 S . C H2 O)x

CI PMS, COM

PCT Polyether, Polyether formed, Polyother

LC STN Files: CA, CAPLUS, USPATZ, USPATFULL

CM 1

CRN 98-11-3

CM 2

CRN 50-00-0 CMF C H2 O

$H_2C = 0$

8 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 4 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN

RN **79975-37-4** REGISTRY

ED Entered STN: 16 Nov 1984

OTHER NAMES:

CN Poly(4-vinylpyridine) p-toluenesulfonate

MF C7 H8 O3 S . x (C7 H7 N)x

PCT Polyvinyl

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

CM 1

CRN 104-15-4 CMF C7 H8 O3 S

CM 2

CRN 25232-41-1 CMF (C7 H7 N)x

CCI PMS

CM 3

CRN 100-43-6 CMF C7 H7 N

5 REFERENCES IN FILE CA (1907 TO DATE) 5 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 5 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN

RN 65595-90-6 REGISTRY

ED Entered STN: 16 Nov 1984

CN 1-Naphthalenesulfonamide, N-(6-aminohexyl)-5-chloro- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN N-(6-Aminohexyl)-5-chloro-1-naphthalenesulfonamide

CN W 7

CN W7 (pharmaceutical)

FS 3D CONCORD

MF C16 H21 Cl N2 O2. S

CI CON

LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAPLUS, CSCHEM, DDFU, DRUGU, EMBASE, IPA, MEDLINE, NIOSHTIC, PHAR, RTECS*, SYNTHLINE, TOXCENTER, USPATFULL

(*File contains numerically searchable property data)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

486 REFERENCES IN FILE CA (1907 TO DATE)
7 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
486 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 6 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN

RN 54640-82-3 REGISTRY

ED Entered STN: 16 Nov 1984

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer
with 2-propenenitrile (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Propenenitrile, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI)

OTHER NAMES:

CN 2-Acrylamido-2-methyl-1-propanesulfonic acid-acrylonitrile copolymer

CN 2-Acrylamido-2-methylpropanesulfonic acid-acrylonitrile copolymer

MF (C7 H13 N O4 S . C3 H3 N)x

CI PMS

PCT Polyacrylic

LC STN Files: CA, CAPLUS, CHEMCATS, CSCHEM, IFICDB, IFIPAT, IFIUDB,

CM 1

CRN 15214-89-8 CMF C7 H13 N O4 S

$$\begin{array}{c} \text{O} \\ || \\ \text{NH-C-CH} \\ | \\ \text{Me-C-CH}_2 \\ | \\ \text{Me} \end{array}$$

CM 2

CRN 107-13-1 CMF C3 H3 N

$H_2C = CH - C = N$

30 REFERENCES IN FILE CA (1907 TO DATE)

4 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

30 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 7 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN

RN 51121-85-8 REGISTRY

ED Entered STN: 16 Nov 1984

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Benzene, ethenyl-, polymer with 2-methyl-2-[(1-oxo-2-propenyl)amino]-1-propanesulfonic acid (9CI)

OTHER NAMES:

CN 2-Acrylamido-2-methyl-1-propanesulfonic acid-styrene copolymer

CN 2-Acrylamido-2-methyl-1-propanesulfonic acid-styrene polymer

CN 2-Acrylamido-2-methylpropanesulfonic acid-styrene copolymer

CN Styrene-2-acrylamido-2-methylpropanesulfonic acid copolymer

CN Styrene-2-acrylamido-2-methylpropylsulfonic acid copolymer

MF (C8 H8 . C7 H13 N O4 S)x

CI PMS, COM

PCT Polyacrylic, Polystyrene

LC STN Files: CA, CAPLUS, CHEMCATS, CHEMLIST, CSCHEM, IFICDB, IFIPAT, IFIUDB, MSDS-OHS, TOXCENTER, USPAT2, USPATFULL

Other Sources: DSL**

(**Enter CHEMLIST File for up-to-date regulatory information)

CM 1

CRN 15214-89-8 CMF C7 H13 N O4 S

```
Me
          2
     CM
     CRN
          100-42-5
     CMF
          C8 H8
H2C== CH-Ph
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
              76 REFERENCES IN FILE CA (1907 TO DATE)
               2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
              76 REFERENCES IN FILE CAPLUS (1907 TO DATE)
L7
     ANSWER 8 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN
     27119-07-9 REGISTRY
ED
     Entered STN: 16 Nov 1984
CN
     1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, homopolymer
     (9CI)
           (CA INDEX NAME)
OTHER CA INDEX NAMES:
     1-Propanesulfonic acid, 2-acrylamido-2-methyl-, polymers (8CI)
OTHER NAMES:
CN
     2-Acrylamido-2,2-dimethylethanesulfonic acid polymer
CN
     2-Acrylamido-2-methyl-1-propanesulfonic acid homopolymer
CN
     2-Acrylamido-2-methyl-1-propanesulfonic acid polymer
CN
     2-Acrylamido-2-methylpropanesulfonic acid homopolymer
CN
     2-Acrylamido-2-methylpropanesulfonic acid polymer
CN
     2-Acryloylamino-2-methylpropanesulfonic acid homopolymer
CN
     AMPS homopolymer
CN
     Aron A 12SL
CN
     Clariant 2000
CN
     HSP 1180
     PAM 001
CN
CN
     Poly(2-acrylamide-2-methylpropanesulfonic acid)
CN
     Poly(2-acrylamido-2-methyl-1-propanesulfonic acid)
CN
     Poly(2-acrylamido-2-methyl-1-sulfopropane)
CN
     Poly(2-acrylamido-2-methylpropanesulfonic acid)
CN
     Polymer 2000
CN
     Rheothik 80-11
CN
     TBAS-Q homopolymer
     60474-89-7, 88528-38-5, 201849-71-0, 201849-72-1, 201849-73-2, 201849-74-3
DR
MF
     (C7 H13 N O4 S)x
CI
     PMS, COM
PCT
     Polyacrylic
LC
                  AGRICOLA, BIOSIS, CA, CAPLUS, CHEMCATS, CHEMLIST, CIN,
     STN Files:
       CSCHEM, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, IFICDB, IFIPAT,
       IFIUDB, MEDLINE, MSDS-OHS, PHAR, PIRA, PROMT, TOXCENTER, USPAT2,
       USPATFULL
     Other Sources:
                      DSL**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

CM 1

CRN 15214-89-8 CMF C7 H13 N O4 S

$$\begin{array}{c} \text{O} \\ || \\ \text{NH-C-CH} \\ | \\ \text{Me-C-CH}_2 \\ | \\ \text{SO}_3 \\ | \\ \text{Me} \end{array}$$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

713 REFERENCES IN FILE CA (1907 TO DATE)

78 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

714 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 9 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN

RN 26795-32-4 REGISTRY

ED Entered STN: 16 Nov 1984

CN Benzene, 1-methoxy-4-(1E)-1-propenyl-, (E)-, homopolymer (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Anisole, p-propenyl-, (E)-, polymers (8CI)

CN Benzene, 1-methoxy-4-(1-propenyl)-, (E)-, homopolymer

OTHER NAMES:

CN Poly(trans-anethole)

FS STEREOSEARCH

MF (C10 H12 O)x

CI PMS

PCT Polystyrene

LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

CM 1

CRN 4180-23-8

CMF C10 H12 O

Double bond geometry as shown.

- 45 REFERENCES IN FILE CA (1907 TO DATE)
- 33 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
- 45 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L7 ANSWER 10 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN

RN 26101-52-0 REGISTRY

ED Entered STN: 16 Nov 1984

CN Ethenesulfonic acid, homopolymer (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Ethenesulfonic acid, polymers (8CI)

OTHER NAMES:

CN Ethylenesulfonic acid polymer

```
CN
     Poly(ethenesulfonic acid)
     Poly(ethylenesulfonic acid)
CN
CN
     Poly(vinylsulfonic acid)
CN
     PVS
CN
     Vinylsulfonic acid homopolymer
     Vinylsulfonic acid polymer
CN
MF
     (C2 H4 O3 S)x
CI
     PMS, COM
PCT
     Polyvinyl
LC
     STN Files: AGRICOLA, BIOSIS, CA, CAPLUS, IFICDB, IFIPAT, IFIUDB,
       MEDLINE, PHAR, PIRA, PROMT, TOXCENTER, USAN, USPATZ, USPATFULL
     CM
          1
     CRN 1184-84-5
     CMF C2 H4 O3 S
H_2C = CH - SO_3H
             629 REFERENCES IN FILE CA (1907 TO DATE)
              55 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             631 REFERENCES IN FILE CAPLUS (1907 TO DATE)
L7
     ANSWER 11 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN
     10139-74-9 REGISTRY
ED
     Entered STN: 16 Nov 1984
     Benzenemethanesulfonic acid, \alpha, \alpha-diphenyl- (9CI) (CA INDEX
CN
     NAME)
OTHER CA INDEX NAMES:
     Methanesulfonic acid, triphenyl- (6CI, 7CI, 8CI)
CN
MF
     C19 H16 O3 S
CI
LC
     STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, GMELIN*, USPATFULL
         (*File contains numerically searchable property data)
   Ph
      SO<sub>3</sub>H
   Ph
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
               7 REFERENCES IN FILE CA (1907 TO DATE)
               7 REFERENCES IN FILE CAPLUS (1907 TO DATE)
               2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
L7
     ANSWER 12 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN
     9017-33-8 REGISTRY
     Entered STN: 16 Nov 1984
     Naphthalenesulfonic acid, polymer with formaldehyde (8CI, 9CI) (CA INDEX
OTHER CA INDEX NAMES:
     Formaldehyde, polymer with naphthalenesulfonic acid (9CI)
OTHER NAMES:
CN
    Arkotan
CN
    Belloid SFD
CN
    Cementa Melcrete
```

CN

CFR 2L

```
CN
     Formaldehyde-naphthalenesulfonic acid copolymer
CN
     Formaldehyde-naphthalenesulfonic acid polymer
CN
     Formalin-naphthalenesulfonic acid polymer
CN
     Leukanol
CN
     Levelon PHL
CN
     Melcrete 500F
CN
     Naphthalenesulfonic acid-formaldehyde copolymer
CN
     Naphthalenesulfonic acid-formaldehyde polymer
CN
     Naphthalenesulfonic acid-formaldehyde resin
CN
CN
     Nopcosant
     Pionin A 45L
CN
     Sikament 210
CN
     Silfix N
CN
CN
     Tamol NH
CN
     VNIIZh 30-03
DR
     121870-61-9, 124861-30-9, 103780-12-7, 37248-22-9, 138636-80-3,
     73157-81-0, 78362-11-5
MF
     (C10 H8 O3 S . C H2 O)x
     PMS, COM
CI
     Polyether, Polyether formed, Polyother
PCT
LC
     STN Files:
                BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN,
       IFICDB, IFIPAT, IFIUDB, MEDLINE, PROMT, TOXCENTER, USPAT2, USPATFULL,
     Other Sources:
                      DSL**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
     CM
     CRN 25155-19-5
     CMF C10 H8 O3 S
     CCI IDS
 D1-S03H
     CM
          2
     CRN
          50-00-0
     CMF
          C H2 O
H_2C = 0
             969 REFERENCES IN FILE CA (1907 TO DATE)
             115 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             970 REFERENCES IN FILE CAPLUS (1907 TO DATE)
L7
    ANSWER 13 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN
    8068-05-1 REGISTRY
ED
    Entered STN: 16 Nov 1984
CN
    Lignin, alkali (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
    Alkali lignin
CN
    Alkali soluble lignin
```

```
CN Curan
     Curan (lignin)
CN
     Curan 100
CN
     Curan 27-11
CN
CN
     Eucalin
     Indulin A
CN
CN
     Indulin AG
CN
     Indulin AT
CN
     Indulin AT 1369
CN
     Indulin ATR
     KL 2
CN
     KL 2 (binder)
CN
CN
     KL 88
CN
     Kraft lignin
CN
     Lignac 15SP
CN
     Lignin, kraft
CN
     Lignin, soda
CN
     Lignin, sulfate
     Meadol MRM
CN
     PC 940C
CN
     Reax 27
CN
CN
     Reax 39
CN
     Soda lignin
CN
     Sulfate lignin
CN
     Sulphate lignin
CN
     Tomlinite
DR
     37225-42-6
MF
     Unspecified
CI
     PMS, COM, MAN
PCT
     Manual registration, Polyother, Polyother only
LC
                 AGRICOLA, BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS, CHEMLIST,
       CIN, CSCHEM, IFICDB, IFIPAT, IFIUDB, MEDLINE, NIOSHTIC, PIRA, PROMT,
       TOXCENTER, USPAT2, USPATFULL
                    DSL**, TSCA**
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
            1641 REFERENCES IN FILE CA (1907 TO DATE)
             235 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            1646 REFERENCES IN FILE CAPLUS (1907 TO DATE)
L7
     ANSWER 14 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN
     8062-15-5 REGISTRY
ED
     Entered STN: 16 Nov 1984
CN
     Lignosulfonic acid (9CI) (CA INDEX NAME)
OTHER NAMES:
CN
     Ameribond 2X
CN
     Borresperse 3A
CN
     HR 6L
CN
     HR 7
CN
     Indulin SN
CN
     Lignin, sulfite
CN
    Ligninsulfonate
CN
    Ligninsulfonic acid
CN
     Lignosulfate
CN
    Lignosulfonate
CN
    LST 7
CN
     Poly(lignosulfonic acid)
CN
     Protektol W
CN
     Sanex C
CN
     Sulfite liquin
```

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CN
      Sulfolignin
      Sulfonic acids, ligno
CN
CN ·
     Sulfonylliquin
CN
     Vanilex HW
CN
     Wafex SR
DR
      58318-45-9
MF
     Unspecified
CI
      PMS, COM, MAN
PCT
     Manual registration, Polyother, Polyother only
LC
                  AGRICOLA, ANABSTR, AQUIRE, BIOSIS, BIOTECHNO, CA, CAPLUS,
        CASREACT, CBNB, CHEMLIST, CIN, CSCHEM, EMBASE, IFICDB, IFIPAT, IFIUDB,
        MEDLINE, NAPRALERT, NIOSHTIC, PIRA, PROMT, RTECS*, TOXCENTER, TULSA,
       USPAT2, USPATFULL, VTB
          (*File contains numerically searchable property data)
                       DSL**, TSCA**
      Other Sources:
          (**Enter CHEMLIST File for up-to-date regulatory information)
 *** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
             5415 REFERENCES IN FILE CA (1907 TO DATE)
             2441 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             5418 REFERENCES IN FILE CAPLUS (1907 TO DATE)
L7
     ANSWER 15 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN
      6994-45-2 REGISTRY
FD
      Entered STN: 16 Nov 1984
      1-Tetradecanesulfonic acid, sodium salt (6CI, 7CI, 8CI, 9CI) (CA INDEX
     NAME)
OTHER NAMES:
     Sodium myristylsulfonate
CN
DR
      163883-59-8
     C14 H30 O3 S . Na
MF
CI
LC
     STN Files:
                  ANABSTR, BEILSTEIN*, CA, CAOLD, CAPLUS, CHEMCATS, CHEMLIST,
       CSCHEM, IFICDB, IFIUDB, TOXCENTER, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
CRN
      (7314 - 37 - 6)
HO_3S-(CH_2)_{13}-Me
      Na
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
              201 REFERENCES IN FILE CA (1907 TO DATE)
             201 REFERENCES IN FILE CAPLUS (1907 TO DATE)
              11 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
L7
     ANSWER 16 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
RN
     588-59-0 REGISTRY
ED
     Entered STN: 16 Nov 1984
     Benzene, 1,1'-(1,2-ethenediyl)bis- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Stilbene (8CI)
OTHER NAMES:
     β-Phenylstyrene
     1,1'-(1,2-Ethenediyl)bis[benzene]
CN
     1,2-Diphenylethene
CN
     1,2-Diphenylethylene
CN
     Bibenzal
```

```
Bibenzylidene
CN
FS
     3D CONCORD
MF
     C14 H12
CI
     COM
LC
     STN Files:
                   AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA,
       CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM,
       CSNB, DETHERM*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC,
       PDLCOM*, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, USPAT2,
       USPATFULL, VTB
          (*File contains numerically searchable property data)
     Other Sources: EINECS**, NDSL**, TSCA**
          (**Enter CHEMLIST File for up-to-date regulatory information)
Ph-CH=CH-Ph
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
            3497 REFERENCES IN FILE CA (1907 TO DATE)
              591 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            3504 REFERENCES IN FILE CAPLUS (1907 TO DATE)
                2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
     ANSWER 17 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN
L7
RN
     520-26-3 REGISTRY
ED
     Entered STN: 16 Nov 1984
     4H-1-Benzopyran-4-one, 7-[\{6-0-(6-deoxy-\alpha-L-mannopyranosyl)-\beta-D-
     glucopyranosyl]oxy]-2,3-dihydro-5-hydroxy-2-(3-hydroxy-4-methoxyphenyl)-,
     (2S) - (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
     4H-1-Benzopyran-4-one, 7-[[6-0-(6-deoxy-\alpha-L-mannopyranosyl)-\beta-D-
     glucopyranosyl]oxy]-2,3-dihydro-5-hydroxy-2-(3-hydroxy-4-methoxyphenyl)-,
CN
     Flavanone, 3',5,7-trihydroxy-4'-methoxy-, 7-(6-0-α-L-rhamnosyl-D-
     glucoside) (7CI)
     Hesperidin (8CI)
OTHER NAMES:
CN
     Cirantin
CN
     Hesperetin 7-rhamnoglucoside
CN
     Hesperetin 7-rutinoside
CN
     Hesperidine
CN
     Hesperidoside
CN
     Hesperitin 7-rutinosid
CN
     NSC 44184
FS
     STEREOSEARCH
DR
     16643-24-6, 17654-22-7, 15512-51-3, 28283-75-2, 30927-97-0, 32737-61-4,
     106904-63-6
MF
     C28 H34 O15
CI
     COM
LC
     STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS,
       BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS,
       CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU, EMBASE,
       IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, NAPRALERT, NIOSHTIC, PROMT,
       PS, RTECS*, TOXCENTER, USAN, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources:
                      DSL**, EINECS**, TSCA**
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

Absolute stereochemistry.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1714 REFERENCES IN FILE CA (1907 TO DATE)
74 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1718 REFERENCES IN FILE CAPLUS (1907 TO DATE)

1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L7 ANSWER 18 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN

RN 103-65-1 REGISTRY

ED Entered STN: 16 Nov 1984

CN Benzene, propyl- (8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1-Phenylpropane

CN 1-Propylbenzene

CN Isocumene

CN n-Propylbenzene

CN NSC 16941

CN Propylbenzene

FS 3D CONCORD

DR 74296-31-4

MF C9 H12

CI COM

LC STN Files: AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*, DIPPR*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HSDB*, IFICDB, IFIPAT, IFIUDB, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PROMT, RTECS*, SPECINFO, TOXCENTER, TULSA, ULIDAT, USPATFULL, VTB

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5075 REFERENCES IN FILE CA (1907 TO DATE)

50 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 5088 REFERENCES IN FILE CAPLUS (1907 TO DATE) 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

ANSWER 19 OF 19 REGISTRY COPYRIGHT 2006 ACS on STN L7 RN 82-76-8 REGISTRY ED Entered STN: 16 Nov 1984 1-Naphthalenesulfonic acid, 8-(phenylamino) - (9CI) (CA INDEX NAME) CN OTHER CA INDEX NAMES: 1-Naphthalenesulfonic acid, 8-anilino- (7CI, 8CI) OTHER NAMES: 1-(Phenylamino)-8-naphthalenesulfonic acid CN CN 1-Anilino-8-naphthalenesulfonic acid 8-(Phenylamino)-1-naphthalenesulfonic acid CN CN 8-Anilino-1-naphthalenesulfonic acid CN CN ANS (fluorescent probe) CN NSC 1746 CN Peri acid, phenyl-Phenyl peri acid CN 54784-66-6 DR MF C16 H13 N O3 S CI COM LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CSCHEM, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NIOSHTIC, SPECINFO, TOXCENTER, USPAT2, USPATFULL (*File contains numerically searchable property data)

(**Enter CHEMLIST File for up-to-date regulatory information)

HO₃S NHPh

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

Other Sources: DSL**, EINECS**, TSCA**

1351 REFERENCES IN FILE CA (1907 TO DATE)
58 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
1353 REFERENCES IN FILE CAPLUS (1907 TO DATE)
5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> sel rn name 8, 7, 6, 4 E20 THROUGH E49 ASSIGNED

=> fil hcapl COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 41.22 141.09 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0:00 -14.25

FILE 'HCAPLUS' ENTERED AT 19:58:23 ON 01 FEB 2006

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FILE COVERS 1907 - 1 Feb 2006 VOL 144 ISS 6 FILE LAST UPDATED: 31 Jan 2006 (20060131/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

```
=> s e20-49
          2635 "AMPS"/BI
        102503 "HOMOPOLYMER"/BI
         11286 "HOMOPOLYMERS"/BI
        110908 "HOMOPOLYMER"/BI
                 (("HOMOPOLYMER" OR "HOMOPOLYMERS")/BI)
            29 "AMPS HOMOPOLYMER"/BI
                (("AMPS"(W)"HOMOPOLYMER")/BI)
           958 "ARON"/BI
            40 "ARONS"/BI
           998 "ARON"/BI
                 (("ARON" OR "ARONS")/BI)
     19477909 "A"/BI
             5 "12SL"/BI
             1 "ARON A 12SL"/BI
                 (("ARON"(W)"A"(W)"12SL")/BI)
           113 "CLARIANT"/BI
        176044 "2000"/BI
             1 "CLARIANT 2000"/BI
                 (("CLARIANT"(W)"2000")/BI)
         16904 "HSP"/BI
          2248 "HSPS"/BI
         17372 "HSP"/BI
                 (("HSP" OR "HSPS")/BI)
          5011 "1180"/BI
            11 "HSP 1180"/BI
                 (("HSP"(W)"1180")/BI)
          4183 "PAM"/BI
          271 "PAMS"/BI
          4380 "PAM"/BI
                 (("PAM" OR "PAMS")/BI)
        184389 "001"/BI
             1 "PAM 001"/BI
                 (("PAM"(W)"001")/BI)
        657537 "POLY"/BI
             2 "POLIES"/BI
       657538 "POLY"/BI
                 (("POLY" OR "POLIES")/BI)
      8624088 "2"/BI
        49423 "ACRYLAMIDE"/BI
         2306 "ACRYLAMIDES"/BI
```

```
50120 "ACRYLAMIDE"/BI
          (("ACRYLAMIDE" OR "ACRYLAMIDES")/BI)
8624088 "2"/BI
   2038 "METHYLPROPANESULFONIC"/BI
4094502 "ACID"/BI
1508860 "ACIDS"/BI
4580871 "ACID"/BI
          (("ACID" OR "ACIDS")/BI)
     12 "POLY (2-ACRYLAMIDE-2-METHYLPROPANESULFONIC ACID) "/BI
          (("POLY"(W)"2"(W)"ACRYLAMIDE"(W)"2"(W)"METHYLPROPANESULFONIC"(
          W) "ACID" ) /BI)
 657537 "POLY"/BI
      2 "POLIES"/BI
 657538 "POLY"/BI
          (("POLY" OR "POLIES")/BI)
8624088 "2"/BI
  4777 "ACRYLAMIDO"/BI
8624088 "2"/BI
 953440 "METHYL"/BI
    653 "METHYLS"/BI
 953838 "METHYL"/BI
          (("METHYL" OR "METHYLS")/BI)
 901600 "ME"/BI
 10238 "MES"/BI
 907914 "ME"/BI
          (("ME" OR "MES")/BI)
1536884 "METHYL"/BI
          (("METHYL" OR "ME")/BI)
8540280 "1"/BI
   2657 "PROPANESULFONIC"/BI
4094502 "ACID"/BI
1508860 "ACIDS"/BI
4580871 "ACID"/BI
          (("ACID" OR "ACIDS")/BI)
    125 "POLY(2-ACRYLAMIDO-2-METHYL-1-PROPANESULFONIC ACID)"/BI
          (("POLY"(W)"2"(W)"ACRYLAMIDO"(W)"2"(W)"METHYL"(W)"1"(W)"PROPAN
          ESULFONIC" (W) "ACID") /BI)
 657537 "POLY"/BI
      2 "POLIES"/BI
 657538 "POLY"/BI
          (("POLY" OR "POLIES")/BI)
8624088 "2"/BI
  4777 "ACRYLAMIDO"/BI
8624088 "2"/BI
 953440 "METHYL"/BI
    653 "METHYLS"/BI
 953838 "METHYL"/BI
          (("METHYL" OR "METHYLS")/BI)
 901600 "ME"/BI
 10238 "MES"/BI
 907914 "ME"/BI
          (("ME" OR "MES")/BI)
1536884 "METHYL"/BI
          (("METHYL" OR "ME")/BI)
8540280 "1"/BI
     13 "SULFOPROPANE"/BI
      2 "POLY (2-ACRYLAMIDO-2-METHYL-1-SULFOPROPANE) "/BI
         . (("POLY"(W)"2"(W)"ACRYLAMIDO"(W)"2"(W)"METHYL"(W)"1"(W)"SULFOP
         ROPANE")/BI)
 657537 "POLY"/BI
      2 "POLIES"/BI
 657538 "POLY"/BI
          (("POLY" OR "POLIES")/BI)
8624088 "2"/BI
```

```
4777 "ACRYLAMIDO"/BI
8624088 "2"/BI
   2038 "METHYLPROPANESULFONIC"/BI
4094502 "ACID"/BI
1508860 "ACIDS"/BI
4580871 "ACID"/BI
          (("ACID" OR "ACIDS")/BI)
    206 "POLY(2-ACRYLAMIDO-2-METHYLPROPANESULFONIC ACID)"/BI
          (("POLY"(W)"2"(W)"ACRYLAMIDO"(W)"2"(W)"METHYLPROPANESULFONIC"(
          W) "ACID")/BI)
 657537 "POLY"/BI
      2 "POLIES"/BI
 657538 "POLY"/BI
          (("POLY" OR "POLIES")/BI)
5256154 "4"/BI
  15214 "VINYLPYRIDINE"/BI
    888 "VINYLPYRIDINES"/BI
  15358 "VINYLPYRIDINE"/BI
          (("VINYLPYRIDINE" OR "VINYLPYRIDINES")/BI)
2379404 "P"/BI
  15908 "TOLUENESULFONATE"/BI
   1480 "TOLUENESULFONATES"/BI
  16502 "TOLUENESULFONATE"/BI
          (("TOLUENESULFONATE" OR "TOLUENESULFONATES")/BI)
      3 "POLY (4-VINYLPYRIDINE) P-TOLUENESULFONATE"/BI
        (("POLY"(W)"4"(W)"VINYLPYRIDINE"(W)"P"(W)"TOLUENESULFONATE")/B
          I)
1045718 "POLYMER"/BI
 858279 "POLYMERS"/BI
1413682 "POLYMER"/BI
          (("POLYMER" OR "POLYMERS")/BI)
 176044 "2000"/BI
     21 "POLYMER 2000"/BI
          (("POLYMER"(W)"2000")/BI)
     6 "RHEOTHIK"/BI
 942300 "80"/BI
 906539 "11"/BI
      6 "RHEOTHIK 80-11"/BI
          (("RHEOTHIK"(W)"80"(W)"11")/BI)
 274343 "STYRENE"/BI
   4446 "STYRENES"/BI
 275429 "STYRENE"/BI
          (("STYRENE" OR "STYRENES")/BI)
8624088 "2"/BI
   4777 "ACRYLAMIDO"/BI
8624088 "2"/BI
   2038 "METHYLPROPANESULFONIC"/BI
4094502 "ACID"/BI
1508860 "ACIDS"/BI
4580871 "ACID"/BI
          (("ACID" OR "ACIDS")/BI)
 579381 "COPOLYMER"/BI
 186191 "COPOLYMERS"/BI
 628204 "COPOLYMER"/BI
          (("COPOLYMER" OR "COPOLYMERS")/BI)
      3 "STYRENE-2-ACRYLAMIDO-2-METHYLPROPANESULFONIC ACID COPOLYMER"/BI
          (("STYRENE"(W)"2"(W)"ACRYLAMIDO"(W)"2"(W)"METHYLPROPANESULFONI
          C"(W) "ACID"(W) "COPOLYMER")/BI)
 274343 "STYRENE"/BI
  4446 "STYRENES"/BI
275429 "STYRENE"/BI
          (("STYRENE" OR "STYRENES")/BI)
8624088 "2"/BI
   4777 "ACRYLAMIDO"/BI
```

```
8624088 "2"/BI
      26 "METHYLPROPYLSULFONIC"/BI
 4094502 "ACID"/BI
 1508860 "ACIDS"/BI
 4580871 "ACID"/BI
           (("ACID" OR "ACIDS")/BI)
  579381 "COPOLYMER"/BI
  186191 "COPOLYMERS"/BI
  628204 "COPOLYMER"/BI
           (("COPOLYMER" OR "COPOLYMERS")/BI)
       1 "STYRENE-2-ACRYLAMIDO-2-METHYLPROPYLSULFONIC ACID COPOLYMER"/BI
           (("STYRENE"(W)"2"(W)"ACRYLAMIDO"(W)"2"(W)"METHYLPROPYLSULFONIC
           "(W) "ACID"(W) "COPOLYMER")/BI)
     230 "TBAS"/BI
  164378 "Q"/BI
  102503 "HOMOPOLYMER"/BI
  11286 "HOMOPOLYMERS"/BI
  110908 "HOMOPOLYMER"/BI
           (("HOMOPOLYMER" OR "HOMOPOLYMERS")/BI)
       5 "TBAS-Q HOMOPOLYMER"/BI
           (("TBAS"(W)"Q"(W)"HOMOPOLYMER")/BI)
 8624088 "2"/BI
    4777 "ACRYLAMIDO"/BI
 8624088 "2"/BI
  953440 "METHYL"/BI
     653 "METHYLS"/BI
  953838 "METHYL"/BI
           (("METHYL" OR "METHYLS")/BI)
  901600 "ME"/BI
  10238 "MES"/BI
  907914 "ME"/BI
           (("ME" OR "MES")/BI)
 1536884 "METHYL"/BI
           (("METHYL" OR "ME")/BI)
 8540280 "1"/BI
    2657 "PROPANESULFONIC"/BI
4094502 "ACID"/BI
1508860 "ACIDS"/BI
 4580871 "ACID"/BI
           (("ACID" OR "ACIDS")/BI)
  102503 "HOMOPOLYMER"/BI
  11286 "HOMOPOLYMERS"/BI
  110908 "HOMOPOLYMER"/BI
           (("HOMOPOLYMER" OR "HOMOPOLYMERS")/BI)
      18 "2-ACRYLAMIDO-2-METHYL-1-PROPANESULFONIC ACID HOMOPOLYMER"/BI
           (("2"(W)"ACRYLAMIDO"(W)"2"(W)"METHYL"(W)"1"(W)"PROPANESULFONIC
           "(W) "ACID"(W) "HOMOPOLYMER")/BI)
 8624088 "2"/BI
    4777 "ACRYLAMIDO"/BI
 8624088 "2"/BI
 953440 "METHYL"/BI
     653 "METHYLS"/BI
 953838 "METHYL"/BI
           (("METHYL" OR "METHYLS")/BI)
 901600 "ME"/BI
  10238 "MES"/BI
 907914 "ME"/BI
           (("ME" OR "MES")/BI)
 1536884 "METHYL"/BI
           (("METHYL" OR "ME")/BI)
8540280 "1"/BI
   2657 "PROPANESULFONIC"/BI
4094502 "ACID"/BI
1508860 "ACIDS"/BI
```

```
4580871 "ACID"/BI
          (("ACID" OR "ACIDS")/BI)
1045718 "POLYMER"/BI
858279 "POLYMERS"/BI
1413682 "POLYMER"/BI
          (("POLYMER" OR "POLYMERS")/BI)
     26 "2-ACRYLAMIDO-2-METHYL-1-PROPANESULFONIC ACID POLYMER"/BI
          (("2"(W)"ACRYLAMIDO"(W)"2"(W)"METHYL"(W)"1"(W)"PROPANESULFONIC
          "(W) "ACID"(W) "POLYMER")/BI)
8624088 "2"/BI
   4777 "ACRYLAMIDO"/BI
8624088 "2"/BI
 953440 "METHYL"/BI
    653 "METHYLS"/BI
 953838 "METHYL"/BI
          (("METHYL" OR "METHYLS")/BI)
 901600 "ME"/BI
 10238 "MES"/BI
 907914 "ME"/BI
          (("ME" OR "MES")/BI)
1536884 "METHYL"/BI
          (("METHYL" OR "ME")/BI)
8540280 "1"/BI
   2657 "PROPANESULFONIC"/BI
4094502 "ACID"/BI
1508860 "ACIDS"/BI
4580871 "ACID"/BI
          (("ACID" OR "ACIDS")/BI)
  89316 "ACRYLONITRILE"/BI
    968 "ACRYLONITRILES"/BI
  89581 "ACRYLONITRILE"/BI
          (("ACRYLONITRILE" OR "ACRYLONITRILES")/BI)
 579381 "COPOLYMER"/BI
 186191 "COPOLYMERS"/BI
 628204 "COPOLYMER"/BI
          (("COPOLYMER" OR "COPOLYMERS")/BI)
      4 "2-ACRYLAMIDO-2-METHYL-1-PROPANESULFONIC ACID-ACRYLONITRILE
        COPOLYMER"/BI
          (("2"(W)"ACRYLAMIDO"(W)"2"(W)"METHYL"(W)"1"(W)"PROPANESULFONIC
          "(W) "ACID"(W) "ACRYLONITRILE"(W) "COPOLYMER")/BI)
8624088 "2"/BI
   4777 "ACRYLAMIDO"/BI
8624088 "2"/BI
 953440 "METHYL"/BI
    653 "METHYLS"/BI
 953838 "METHYL"/BI
          (("METHYL" OR ."METHYLS")/BI)
 901600 "ME"/BI
 10238 "MES"/BI
 907914 "ME"/BI
          (("ME" OR "MES")/BI)
1536884 "METHYL"/BI
          (("METHYL" OR "ME")/BI)
8540280 "1"/BI
   2657 "PROPANESULFONIC"/BI
4094502 "ACID"/BI
1508860 "ACIDS"/BI
4580871 "ACID"/BI
          (("ACID" OR "ACIDS")/BI)
 274343 "STYRENE"/BI
   4446 "STYRENES"/BI
 275429 "STYRENE"/BI
          (("STYRENE" OR "STYRENES")/BI)
 579381 "COPOLYMER"/BI
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186191 "COPOLYMERS"/BI
 628204 "COPOLYMER"/BI
          (("COPOLYMER" OR "COPOLYMERS")/BI)
      2 "2-ACRYLAMIDO-2-METHYL-1-PROPANESULFONIC ACID-STYRENE COPOLYMER"
        /BI
          (("2"(W)"ACRYLAMIDO"(W)"2"(W)"METHYL"(W)"1"(W)"PROPANESULFONIC
          "(W) "ACID"(W) "STYRENE"(W) "COPOLYMER")/BI)
8624088 "2"/BI
   4777 "ACRYLAMIDO"/BI
8624088 "2"/BI
 953440 "METHYL"/BI
    653 "METHYLS"/BI
 953838 "METHYL"/BI
          (("METHYL" OR "METHYLS")/BI)
 901600 "ME"/BI
  10238 "MES"/BI
 907914 "ME"/BI
          (("ME" OR "MES")/BI)
1536884 "METHYL"/BI
          (("METHYL" OR "ME")/BI)
8540280 "1"/BI
   2657 "PROPANESULFONIC"/BI
4094502 "ACID"/BI
1508860 "ACIDS"/BI
4580871 "ACID"/BI
          (("ACID" OR "ACIDS")/BI)
 274343 "STYRENE"/BI
   4446 "STYRENES"/BI
 275429 "STYRENE"/BI
          (("STYRENE" OR "STYRENES")/BI)
1045718 "POLYMER"/BI
 858279 "POLYMERS"/BI
1413682 "POLYMER"/BI
          (("POLYMER" OR "POLYMERS")/BI)
      0 "2-ACRYLAMIDO-2-METHYL-1-PROPANESULFONIC ACID-STYRENE POLYMER"/B
          (("2"(W)"ACRYLAMIDO"(W)"2"(W)"METHYL"(W)"1"(W)"PROPANESULFONIC
          "(W) "ACID"(W) "STYRENE"(W) "POLYMER")/BI)
8624088 "2"/BI
   4777 "ACRYLAMIDO"/BI
8624088 "2"/BI
   2038 "METHYLPROPANESULFONIC"/BI
4094502 "ACID"/BI
1508860 "ACIDS"/BI
4580871 "ACID"/BI
          (("ACID" OR "ACIDS")/BI)
 102503 "HOMOPOLYMER"/BI
 11286 "HOMOPOLYMERS"/BI
 110908 "HOMOPOLYMER"/BI
         (("HOMOPOLYMER" OR "HOMOPOLYMERS")/BI)
     60 "2-ACRYLAMIDO-2-METHYLPROPANESULFONIC ACID HOMOPOLYMER"/BI
          (("2"(W)"ACRYLAMIDO"(W)"2"(W)"METHYLPROPANESULFONIC"(W)"ACID"(
          W) "HOMOPOLYMER") /BI)
8624088 "2"/BI
  4777 "ACRYLAMIDO"/BI
8624088 "2"/BI
  2038 "METHYLPROPANESULFONIC"/BI
4094502 "ACID"/BI
1508860 "ACIDS"/BI
4580871 "ACID"/BI
          (("ACID" OR "ACIDS")/BI)
1045718 "POLYMER"/BI
858279 "POLYMERS"/BI
1413682 "POLYMER"/BI
```

```
(("POLYMER" OR "POLYMERS")/BI)
    100 "2-ACRYLAMIDO-2-METHYLPROPANESULFONIC ACID POLYMER"/BI
          (("2"(W)"ACRYLAMIDO"(W)"2"(W)"METHYLPROPANESULFONIC"(W)"ACID"(
          W) "POLYMER") /BI)
8624088 "2"/BI
   4777 "ACRYLAMIDO"/BI
8624088 "2"/BI
   2038 "METHYLPROPANESULFONIC"/BI
4094502 "ACID"/BI
1508860 "ACIDS"/BI
4580871 "ACID"/BI
          (("ACID" OR "ACIDS")/BI)
  89316 "ACRYLONITRILE"/BI
    968 "ACRYLONITRILES"/BI
  89581 "ACRYLONITRILE"/BI
          (("ACRYLONITRILE" OR "ACRYLONITRILES")/BI)
 579381 "COPOLYMER"/BI
 186191 "COPOLYMERS"/BI
 628204 "COPOLYMER"/BI
          (("COPOLYMER" OR "COPOLYMERS")/BI)
   8 "2-ACRYLAMIDO-2-METHYLPROPANESULFONIC ACID-ACRYLONITRILE COPOLYM
          (("2"(W)"ACRYLAMIDO"(W)"2"(W)"METHYLPROPANESULFONIC"(W)"ACID"(
          W) "ACRYLONITRILE" (W) "COPOLYMER") /BI)
8624088 "2"/BI
   4777 "ACRYLAMIDO"/BI
8624088 "2"/BI
   2038 "METHYLPROPANESULFONIC"/BI
4094502 "ACID"/BI
1508860 "ACIDS"/BI
4580871 "ACID"/BI
          (("ACID" OR "ACIDS")/BI)
 274343 "STYRENE"/BI
   4446 "STYRENES"/BI
 275429 "STYRENE"/BI
          (("STYRENE" OR "STYRENES")/BI)
 579381 "COPOLYMER"/BI
 186191 "COPOLYMERS"/BI
 628204 "COPOLYMER"/BI
          (("COPOLYMER" OR "COPOLYMERS")/BI)
     36 "2-ACRYLAMIDO-2-METHYLPROPANESULFONIC ACID-STYRENE COPOLYMER"/BI
          (("2"(W) "ACRYLAMIDO"(W) "2"(W) "METHYLPROPANESULFONIC"(W) "ACID"(
          W) "STYRENE" (W) "COPOLYMER") /BI)
8624088 "2"/BI
  4777 "ACRYLAMIDO"/BI
8624088 "2"/BI
8624088 "2"/BI
    14 "DIMETHYLETHANESULFONIC"/BI
4094502 "ACID"/BI
1508860 "ACIDS"/BI
4580871 "ACID"/BI
          (("ACID" OR "ACIDS")/BI)
1045718 "POLYMER"/BI
858279 "POLYMERS"/BI
1413682 "POLYMER"/BI
          (("POLYMER" OR "POLYMERS")/BI)
      2 "2-ACRYLAMIDO-2,2-DIMETHYLETHANESULFONIC ACID POLYMER"/BI
          (("2"(W) "ACRYLAMIDO"(W) "2"(W) "2"(W) "DIMETHYLETHANESULFONIC"(W)
          "ACID"(W) "POLYMER")/BI)
8624088 "2"/BI
   247 "ACRYLOYLAMINO"/BI
8624088 "2"/BI
  2038 "METHYLPROPANESULFONIC"/BI
4094502 "ACID"/BI
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1508860 "ACIDS"/BI
       4580871 "ACID"/BI
                 (("ACID" OR "ACIDS")/BI)
        102503 "HOMOPOLYMER"/BI
         11286 "HOMOPOLYMERS"/BI
        110908 "HOMOPOLYMER"/BI
                 (("HOMOPOLYMER" OR "HOMOPOLYMERS")/BI)
             1 "2-ACRYLOYLAMINO-2-METHYLPROPANESULFONIC ACID HOMOPOLYMER"/BI
                 (("2"(W)"ACRYLOYLAMINO"(W)"2"(W)"METHYLPROPANESULFONIC"(W)"ACI
                 D"(W)"HOMOPOLYMER")/BI)
           714 27119-07-9/BI
            76 51121-85-8/BI
            30 54640-82-3/BI
             5 79975-37-4/BI
L8
           989 ("AMPS HOMOPOLYMER"/BI OR "ARON A 12SL"/BI OR "CLARIANT 2000"/BI
                OR "HSP 1180"/BI OR "PAM 001"/BI OR "POLY(2-ACRYLAMIDE-2-METHYL
               PROPANESULFONIC ACID) "/BI OR "POLY(2-ACRYLAMIDO-2-METHYL-1-PROPA
               NESULFONIC ACID) "/BI OR "POLY(2-ACRYLAMIDO-2-METHYL-1-SULFOPROPA
               NE) "/BI OR "POLY(2-ACRYLAMIDO-2-METHYLPROPANESULFONIC ACID) "/BI
               OR "POLY(4-VINYLPYRIDINE) P-TOLUENESULFONATE"/BI OR "POLYMER
               2000"/BI OR "RHEOTHIK 80-11"/BI OR "STYRENE-2-ACRYLAMIDO-2-METHY
               LPROPANESULFONIC ACID COPOLYMER"/BI OR "STYRENE-2-ACRYLAMIDO-2-M
               ETHYLPROPYLSULFONIC ACID COPOLYMER"/BI OR "TBAS-Q HOMOPOLYMER"/B
               I OR "2-ACRYLAMIDO-2-METHYL-1-PROPANESULFONIC ACID HOMOPOLYMER"/
               BI OR "2-ACRYLAMIDO-2-METHYL-1-PROPANESULFONIC ACID POLYMER"/BI
               OR "2-ACRYLAMIDO-2-METHYL-1-PROPANESULFONIC ACID-ACRYLONITRILE
               COPOLYMER"/BI OR "2-ACRYLAMIDO-2-METHYL-1-PROPANESULFONIC ACID-S
               TYRENE COPOLYMER"/BI OR "2-ACRYLAMIDO-2-METHYL-1-PROPANESULFONIC
                ACID-STYRENE POLYMER"/BI OR "2-ACRYLAMIDO-2-METHYLPROPANESULFON
               IC ACID HOMOPOLYMER"/BI OR "2-ACR
=> d his
     (FILE 'HOME' ENTERED AT 19:46:11 ON 01 FEB 2006)
     FILE 'REGISTRY' ENTERED AT 19:46:18 ON 01 FEB 2006
L1
              0 S POLYANETHOLESULFONIC ACID/CN
L2
            379 S LIGNOSULFONIC ACID
L3
              1 S LIGNOSULFONIC ACID/CN
                SEL RN NAME
     FILE 'HCAPLUS' ENTERED AT 19:47:29 ON 01 FEB 2006
L4
          12505 S E1-22
L5
          85819 S SPERM? OR CONTRACEPT?
L6
             14 S L4 AND L5
                DEL SEL
                SEL RN 4
     FILE 'REGISTRY' ENTERED AT 19:53:21 ON 01 FEB 2006
L7
             19 S E1-19
                SEL RN NAME 8, 7, 6, 4
     FILE 'HCAPLUS' ENTERED AT 19:58:23 ON 01 FEB 2006
L8
            989 S E20-49
=> s 18 and 15
             1 L8 AND L5
L9
=> d
     ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2006 ACS on STN
L9
     2003:551175 HCAPLUS
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     139:106471
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Sulfonated compounds as barrier contraceptives

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IN
    Cherr, Gary N.; Salinas, Edward R.
PA
    The Regents of the University of California, USA
    U.S. Pat. Appl. Publ., 20 pp.
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    CODEN: USXXCO
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    English
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    US 2003134803
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            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
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            BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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COST IN U.S. DOLLARS
                                                SINCE FILE
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FULL ESTIMATED COST
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
                                                SINCE FILE
                                                               TOTAL
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CA SUBSCRIBER PRICE
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                                                              -14.25
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SESSION WILL BE HELD FOR 60 MINUTES
STN INTERNATIONAL SESSION SUSPENDED AT 20:00:40 ON 01 FEB 2006